

# BEYOND THALASSOCRACIES

*Understanding processes of Minoanisation  
and Mycenaeanisation in the Aegean*

Edited by

EVI GOROGIANNI, PETER PAVÚK AND LUCA GIRELLA

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## UNDERSTANDING PROCESSES OF MINOANISATION AND MYCENAEANISATION IN THE AEGEAN

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Evi Gorogianni, Peter Pavúk and Luca Girella



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*Front cover: LH IIIA2/IIIB1 clay ram's head rhyton from Grotta (Naxos). Naxos Archaeological Museum.*  
*Courtesy: Andreas Vlachopoulos, photo: Chronis Papanikopoulos © Ephorate of Antiquities for the Cyclades.*  
*Back cover: LM IA ivory signet ring from a LC II context at Phylakopi (after Bosanquet and Welch 1904, 193, Fig. 162).*

To Malcolm H. Wiener



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## PREFACE

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This volume owes its origin to a meeting of minds over Keian sherds and coffee in the summer of 2011 which led to the organisation of a workshop during the 114th Annual Meeting of the Archaeological Institute of America, January 2013 in Seattle. Most of the papers included in this volume were first presented at the conference while two additional contributors (Andreas Vlachopoulos and Jana Mokrišová) were invited to submit their papers to the volume. Carl Knappett and Michael Galaty were asked to discuss the papers and present their thoughts on the session as a whole, and we thank them for their meaningful and provocative positions, additions which only enrich the volume. In many aspects the volume is not just a group of papers, but truly a collaborative work, taking shape in the months after the workshop and we would like to thank the contributors for their patience along the way.

The editors thank Robert Pitt for his assistance with copy-editing. Thanks are due also to the anonymous reviewers whose comments kept us on-track and have

strengthened the final version of the papers. We would also like to thank the following individuals for their help with and contributions to various aspects of this volume: Jack Davis, Peter Demján, Rodney Fitzsimons, Eleni Hatzaki, Carol Hershenson, Colin Macdonald, Joseph Maran, Peter van Minnen, Nicoletta Momigliano, Josef Souček and Brian Trail. Finally, we would like to thank Salvatore Vitale, who helped us to emphasise the potential significance of a comparison between the process of Minoanisation and Mycenaeanisation in the Aegean.

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Akron, Prague and Rome, 31 July 2015  
Evi Gorogianni, Peter Pavúk and Luca Girella

## CONTRIBUTORS

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*Adornment and Textiles in the Aegean Bronze Age* (Leuven and Liège 2012); and "Textile production in Quartier Mu", in J. C. Poursat, *Fouilles exécutées à Malia. Le Quartier Mu V: Vie quotidienne et techniques au Minoen Moyen II* (Études crétoises 34) (Athens 2013) (with E. Andersson Strand and M.-L. Nosch).

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**Luca Girella** is Professor of Aegean Prehistory and Classical Archaeology at the UniNettuno University of Rome. As a member of the Italian Archaeological School of Athens he has worked since 1999 with the excavation teams of the archaeological sites of Phaistos and Hagia Triada (Crete). Since 2009, he is a staff member in the Mikro Vouni project on Samothrace, devoted to the publication of the MBA/early LBA sequence there. His research interests focus on 2nd millennium Crete and the Aegean, with a special regard to Middle-Late Minoan pottery, the Minoanisation process in the Eastern Aegean as well as burial and funerary rituals of the Minoan and Mycenaean cultures. His current projects focus on the study and publication of the Neopalatial deposits from Phaistos and Hagia Triada as well as the publications of the Kamilari tholos tombs and the LM III Kalochorafitis chamber tombs on Crete.

**Evi Gorogianni** is a Visiting College Lecturer at the University of Akron. She did her graduate work at the University of Cincinnati and holds a BA from the University of Athens. Her research focuses on issues of cultural contact, gender, and redefinitions of identity, assessed through the lens of material culture of the Aegean islands during the Middle and Late Bronze Age. She is currently completing a monograph on the results of the Ayia Irini-Northern Sector Archaeological Project, which she co-directed. Her distinctions include the INSTAP Post-Doctoral Fellowship and the Notre Dame Institute of Advanced Study Distinguished Fellow. Her latest project is the study of the MBA ceramic assemblage discovered recently under the theatre of Karthaia on Kea.

**Jill Hilditch** is a Departmental Lecturer in Aegean Prehistory at the University of Oxford. Her principal research focuses on the ceramic analysis of Bronze Age Aegean assemblages and integrated approaches to reconstructing past craft communities. She is currently publishing the Neolithic and Bronze Age ceramic finds of the Keros Island Survey, and the ceramic fabrics of the Dhaskalio-Kavos assemblages, Keros. Ongoing projects include the Middle and Late Bronze ceramics from Akrotiri (with I. Nikolakopoulou), the ceramic fabrics of the Northern Sector at Ayia Irini (with

E. Gorogianni and R. Fitzsimons), the unpublished 1896 ceramic material from the Bronze Age site of Phylakopi (with R. Barber and R. Jones) and the Chalcolithic to Mycenaean ceramic fabrics of Miletus (with C. Knappett).

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*Griechenlands. Sammlung Fritz Schachermeyr III* (Wien 2012) with B. Horejs and *Troia VI Früh und Mitte. Keramik, Stratigraphie, Chronologie*. Studia Troica Monographien 3. (Bonn 2014).

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**Salvatore Vitale** is an Associate Research Member at the Department of *Civiltà & Forme del Sapere (Archeologia)* at the University of Pisa. He has taught Aegean Archaeology at the Universities of Calabria and Milan, and has been a postdoctoral researcher at the Italian School of Archaeology at Athens and the University of Calabria, as well as a Margo Tytus Visiting Scholar at the University of Cincinnati. He has been a staff member of the “Mitrou Archaeological Project”, the Palace of Nestor (PoN) Roof Project and the PoN project at Pylos. Since 2009, he has directed the “Serraglio, Eleona, and Langada Archaeological Project”

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## INTRODUCTION: METHODOLOGICAL CONSIDERATIONS

*Luca Girella, Evi Gorogianni and Peter Pavúk*

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The purpose of this volume is to evaluate and rethink the various processes associated with interregional contact and its associated cultural change using as a test case the material culture of the Middle and Late Bronze Age Aegean. Our focus concentrates on two cultural phenomena: Minoanisation and Mycenaeanisation. Both phenomena, according to the most ‘bare-bones’ definition, describe changes in the material culture of Aegean communities spurred by fashions, technologies, or tropes connected to the palatial communities of Crete and later the Greek Mainland during the Middle and Late Bronze Age respectively. Even though explanations for this culture change vary, for the editors, Minoanisation and Mycenaeanisation were the processes enacted through contact among polities interconnected by a network of associations that transmitted not only commodities but also people, as various papers in this volume show. Since these phenomena follow one another in chronological sequence, it made sense to us that any reappraisal of their character and significance should target those regions of the Aegean basin that were affected by both processes, thus highlighting their similarities and, perhaps most importantly, their differences.

These two phenomena have attracted much scholarly attention over the years and so there exists a wealth of data bearing an enormous potential for use in multiple kinds of analyses. The reasons, though, why a collaborative effort such as the one presented in this volume was needed are multiple. On the one hand, equal attention has not been allotted to the phenomena, nor have the lines of investigation developed along similar intellectual traditions. Current discussions on Minoanisation have already been informed by more recent theoretical trends, especially in material culture studies and post-colonial theory (Broodbank 2004; Whitelaw 2005; Berg 2007a; Davis and Gorogianni 2008;

Knappett and Nikolakopoulou 2008; Girella and Pavúk 2015), but the process of Mycenaeanisation had very much been conceptualized along traditional lines of interpretation at least until fairly recently (e.g., Voskos and Knapp 2008; Knapp and van Dommelen 2010; Hitchcock 2011; Maran 2011; Stockhammer 2012a; Hitchcock and Maeir 2013). Therefore, the editors aspired to gather together a group of people who would explore the potential that the long tradition of research has to offer, perhaps even to move interpretive approaches forward while exploring the untapped potential nestled in a comparison of these phenomena.

The idea for the workshop originated during a visit to the Cycladic island of Kea for a brief inspection of the pottery from Ayia Irini. The editors could not help but remark on the differences between Kea and the Northern Aegean, not only in terms of imports, but also in the ways that local communities reacted to the wider Aegean phenomena, the palatial polities of Crete and Mainland Greece, and their immediate neighbours, since our sites seem to exist on special *frontiers* where different networks and perhaps cultural zones intersect (Lightfoot and Martinez 1995; Cline 2008; Davis and Gorogianni 2008; Harding 2013; Girella and Pavúk 2015). Therefore, we decided that a comparative approach was of utmost importance, one that would compare not only sites or regions but also periods during which these sites underwent similar processes of interregional contact and associated cultural change. Thus, we came up with a list of target sites that would cover a wide geographic range within the Aegean area and also possess a long stratigraphic sequence that harbours evidence of Minoanisation and Mycenaeanisation, albeit to differing degrees.

We opted to invite young scholars (for the most part) who are actively engaged in on-going research in the Aegean region and are trying to understand better the larger picture

of Aegean social behaviour while working on material from large scale excavations, most of which were conducted more than half a century ago. While it is readily apparent that the majority of the contributors are mostly pottery specialists, they do have quite varying educational backgrounds and interests that cover the whole gamut of approaches in ceramic analysis providing a more holistic approach to a wider spectrum of ceramic data formerly completely neglected (*e.g.*, the unpainted pottery, or manufacturing technologies) or intermittently published. Despite the preponderance of pottery, we wished to include other media or artefactual categories, since close examination of these types of material culture speak to different processes and networks of association, a challenge which was met by a few authors in this volume.

Fair warning, this book will prove a disappointment to those readers expecting an overly coherent methodology or theoretical approach applied equally to all of the discussed sites. Nevertheless, we aim at moving the discourse to a new realm, one removed from the ever-present (it seems) colonisation models and embracing a considerably larger body of data. Several central questions were addressed during the AIA workshop and the same questions mostly characterize the spirit of the collected papers. On the one hand, even though these phenomena are not to be reified, the goal is to spot the variation of Minoanisation and Mycenaeanisation across time and space in response to particular ‘glocal’ contexts (Maran 2011; 2013) and perhaps offer some explanation for such variation. On the other hand, we seek to underline the response of local populations (*e.g.*, wholesale or selective appropriation? domination and/or resistance? by whom?) and its effect on various media (pottery, architecture, clothing and other technological traditions), as well as delineate aspects of manipulation and negotiation of local identity formation, hybridisation (Latour 2005; Bhabha 2007; Voskos and Knapp 2008; Maran and Stockhammer 2012; Stockhammer 2012b; Hitchcock and Maeir 2013; Steel 2013; VanValkenburgh 2013) and entanglement (Hodder 2012; Stockhammer 2012a; 2013; Steel 2013, 50–90; VanValkenburgh 2013).

Moreover, the volume manifests a particular propensity in considering most of the sites discussed as border zones, recognized as a hotbed for identity formation (and subsequent fluctuation) in situations of interregional contact (*e.g.*, Lightfoot and Martinez 1995; Cline 2008; Feuer 2011; Abell 2014b; Feuer this volume; Gorogianni this volume; Raymond *et al.* this volume). Contact provides the opportunity for the formulation of ideas about differences and similarities among groups as well as for the ‘materialisation’ of these differences that place material culture in the centre stage; it also provides for a seemingly counter-process: at the same time that identities are construed in polarizing opposition, the communities cross-pollinate each other, to use a sometimes ill-suited biological metaphor (Galaty

this volume). In this respect, the Bronze Age Aegean is an ever-promising case for studying the formation of local or regional identities and their transformation, since people around the Aegean shore always seem to have been in contact with each other, either by necessity or by choice.

Under these circumstances, this volume tests the manifestation of Minoanisation and Mycenaeanisation in four different modern geographical environments (Fig. 1.1), all of which participated in the so-called ‘new environment’ Cyclades (Davis and Gorogianni 2008) to varying degrees, and witnessed intensified types of contact and cultural exchange. While these zones are four different types of *border*, each area shows how players, context and timing matter in negotiating its own *peripherality* (Kardulias 1999; 2009) or ‘centrality’ (as we might add) depending on the nature of relationships established between coastal and non-coastal peoples and between state and non-state entities.

Geographically, the volume starts with the NE Aegean (Pavúk and Girella) and follows the map clockwise to an analysis of the SE Aegean (Raymond *et al.*; Vitale; Mokrišová), then on to the Cyclades (Gorogianni; Earle; Vlachopoulos; Abell and Hilditch), Mainland Greece and the case study of Thessaly (Feuer), concluding with a comment on Mycenaeanisation in Epirus (Galaty).

## **Placing the Volume in the Minoanisation and Mycenaeanisation Debate**

Minoanisation and Mycenaeanisation, apart from being complex, multidirectional, and heterogeneous phenomena, carry the expectations and assumptions of the words from which they originate. Therefore, a brief foray into the terms Minoan and Mycenaean as well as into the history of the discourse is germane to understanding the complexity of the issues involved as well as in placing this particular collection of papers within its proper context and setting.

## **Minoan and Minoanisation**

Long before Sir Arthur Evans conducted his seminal research on Crete, the terms ‘Minoan’ and ‘Minoan Age’ were in use (Karadimas and Momigliano 2004) and had mainly chronological connotations (*i.e.*, comparable to ‘Victorian’ or ‘Edwardian’ expressions) within the intellectual context of the *Altertumswissenschaft* of the mid-19th century. However, it was certainly Evans, in his *Palace of Minos*, who established the term in the literature by choosing it to refer to the culture and by extension also to the people of the island of Crete during the Bronze Age. Many scholars (*e.g.*, Hamilakis 2002a; Broodbank 2004, 50–54; papers in Hamilakis and Momigliano 2006) have raised awareness of the implications of this choice, which basically promotes the impression of a homogeneous bounded and undifferentiated



Fig. 1.1: Map of sites mentioned in the text (by Peter Demján).

entity that operated as a monolithic unit, much like an ethnic state. It has been shown that this view could not have been further from the truth, since the island seems to have undergone a Minoanisation of its own (Broodbank 2004, 51; cf. Bennet and Davis 1999 for a similar process on the Mainland) and even when there is good evidence for cultural homogenization emanating from the centre, *i.e.*, Knossos, there is also good evidence for regionalism and for heterarchical organizations (*e.g.*, Hamilakis 2002b) that act as counterbalances (Crumley 1995; Ehrenreich *et al.* 1995).

This ambiguity creates obvious problems for the discussion of the phenomenon of Minoanisation of the Aegean. Evans' initial proposal pertained to the existence of a Minoan empire in the Aegean (Evans 1928, 626; see also Evans 1935, 283, 754–755), an inference based on the archaeological evidence, as well as the myth of Minoan Thalassocracy in Thucydides (I.4), and has been much disputed and criticised ever since (*e.g.*, Furumark 1950; Buck 1962; several papers in Hägg and Marinatos 1984; Wiener 1990; Knapp 1993; Mountjoy and Ponting 2000).

Nevertheless, its legacy seems to be enduring. Even if Minoan political predominance over the Cyclades, and the rest of the Aegean by extension, has been deemed possible yet difficult to prove (e.g., Niemeier 2004, 395), the colonial overtones that Evans established in the dialogue with his comparison of Minoan Thalassocracy to the *pax Britannica* (Evans 1928, 229–252) seem to be almost inescapable. Thus, many of the formulations on the phenomenon until recently approached it as a ‘pacifying’ process or bringing civilisation to ‘barbarian’ countries.

The major archaeological projects of the 1960s and 1970s in the Aegean (Ayia Irini, Akrotiri, Phylakopi, and on Kythera) were significant catalysts in providing ‘food for thought’ on what these phenomena really entailed, leading to a flourishing of various explanatory models. This is obvious in the papers from the 1982 conference on *The Minoan Thalassocracy: Myth and Reality*, as well as from the *Thera and the Aegean World* conferences, which became the primary media of dissemination of the important work that had been done on the new datasets. This was an important milestone, as Berg (2007a, 66) notes, which promoted the delineation and critical refinement of various terms, such as Thalassocracy, colony, and control, as well as eroded subscription to political domination by Crete over other forms of control (e.g., religious, economic). At any rate, these approaches in different manners to a degree continued Evans’ colonial legacy (even when not directly speaking of colonisation) as it is assumed that less socially complex societies tend to lose their cultural identity (and creativity) once their members become acculturated to a more dominant society’s structures. This model of unidirectional acculturation remained the dominant paradigm in the discourse on Minoanisation.

However, these new datasets, as well as datasets from other explorations, excavations and surface surveys alike, cast in relief another feature of the Aegean cultural landscape, its heterogeneity. It became obvious that the Aegean was not homogeneous in terms of absorbing and/or emulating the new Cretan-inspired trends, with certain loci being more receptive than others, nor were these loci organised in a way that the intensity in emulation would decrease or drop-off with greater distance from Crete, a train of thought which gave rise first to the Western String and later to the Eastern String theories (Davis 1979; Schofield 1982; Davis *et al.* 1983). According to these theories, Minoanised sites were thought to be organised or located along busy travel and communication routes connecting the palatial societies of Crete with areas with much sought after resources, such as metals. Even though these theories have received some criticism on various aspects (Schofield 1982; Georgiou 1993; 1995; 1997; Berg 2006; 2007b; see also Vlachopoulos this volume), in a way they were precursors to the network approach that was explored a few decades later (Knappett *et al.* 2008; Knappett 2011) in the sense that these sites had a

special, albeit not unique (Schofield 1982), relationship with Crete, a relationship which perhaps influenced the process of adoption and emulation of Cretan popular trends, artistic tropes, and technologies.

At the turn of the century, the discourse had reached an impasse of sorts as the field was polarized between Cretan imperialists and Aegean local activists, as Broodbank noted in his seminal article (2004), where apart from delineating the phenomenon, he gave his views on the avenues of research to be pursued. Broodbank’s provocative contribution critically stressed the substantial lack of progress as it pertains to the adoption of emulation models without analysing mechanisms and modes of adoption, as well as the persistent placement of prominent large settlements under the umbrella of Minoanisation (Broodbank 2004, 58). His handling of the case study of Kythera exemplified how he thought Minoanisation should be analysed by investigating pre-Minoanising traits and the relation between Minoanised and non-Minoanised settlements, by minding the spatial and chronological fluctuation of the whole phenomenon and choosing smaller units of analysis along larger approaches (*i.e.*, landscape analysis), and last but not least by integrating the results with independently grounded models of networks of power and human mobility.

A new wave of literature and approaches was occurring at the same time that Broodbank was making his programmatic proclamations. This new wave explored the very aspect criticized above, namely the model of acculturation that does not take into account the active role of local communities which elect to adopt or reject the new or foreign traits and fashions based on the relevance of these issues to local needs.<sup>1</sup> This aspect, which Davis’ *String model* also introduced into the discourse, was a central concern in many papers that were published after the turn of the century and promoted bottom-up approaches focusing on the agency of local communities.

A good example is Whitelaw (2005), who showed that just as there was variability in the landscapes of Minoanised Aegean (see Davis and Cherry 1990), there were significant differences among the main urban sites in the Cyclades, and he used Phylakopi as an example to showcase that the adoption of Minoan material and non-material culture was not widespread across all echelons of society but was probably an elite strategy geared towards establishing the elite group’s pre-eminence in the local context. Similarly, Davis and Gorogianni (2008, 379) considered Minoan fashions, technologies, and practices as part of the Aegean vocabulary of power used by Aegean communities that chose to participate in the so-called *new environment*, *i.e.*, a sort of “more globalized setting in which competition between communities or groups within communities encouraged [such] emulation.”

Other studies focused on material culture both in its capacity to reveal nuanced responses of the local groups

to non-local influence, as well as in the power of material culture to shape people. Berg (2007b) demonstrated that Cretan technologies, specifically the potter's wheel, as well as Cretan inspired shapes produced on the wheel, were incorporated into the local production sequence in a gradual manner that approximates a generational apprenticeship model. Knappett and Nikolakopoulou (2008, 3) argued that a gradual diachronic increase of 'intrusive' elements in a given culture, as was the case at MM IIIA Akrotiri, is indicative of an indigenous emulation rather than a colonial presence (for a similar position, see Stein 2002). Their new synthesis drew upon the work of C. Gosden (2004) who proposed that where imported artefacts are viewed as a form of social capital to be used for local people's own aims, they are the agents promoting change and emulation without necessarily postulating the presence of colonists.

Another conference organised by the Danish Institute in Athens on 2005 (Macdonald *et al.* 2009) focused on the Minoan presence in an area of the Aegean that had not been as systematically discussed and integrated into the mainstream discussion of Minoanisation up to that point. Apart from filling an apparent lacuna in the literature, this conference provided some opportunity to breathe new life into the concept of the 'Minoan thalassocracy' and "the political and military supremacy of New Palace Period Crete" (Niemeier 2009; for the latest synthesis, see Wiener 2013), but mainly to update and systematise the evidence in support of other explanatory models that moved the debate beyond unidirectional acculturation.

The legacy of the work that appeared during the first decade of the 21st century, and especially Broodbank's programmatic piece, has prompted several studies and contributions where detailed approaches to the production of material culture were emphasized. The chance was not only to investigate aspects of technology and skills, but also to trace population mobility through material culture and the transfer of technological know-how (Hilditch 2008; Brysbaert 2011; Cutler 2011; 2012; Knappett 2011; Abell 2014a; Rebay-Salisbury *et al.* 2015; Gorogianni *et al.* 2015; 2016; Knappett and Hilditch 2015; Morgan forthcoming; Girella and Pavuk this volume; Abell and Hilditch this volume; Cutler this volume).

The question therefore in the year 2016 must inevitably be: what is there to add to the discourse? Definitely, more studies that highlight the multi-scale framework that Broodbank (2004, 58) advocated are needed, studies that will start to disentangle the phenomenon into its 'principal parts,' no doubt demonstrating that what we call Minoanisation is the result of many processes, actions, population movements and networks operating at different levels of abstraction and analysis. Moreover, the dominant explanatory paradigm about Minoanisation has focused on the cultural transfers from Crete to a given community and their outcomes, but this approach does not look at Crete

itself: was the search for raw materials and metals the *only* reason for the growth of Cretan cultural traits across the Aegean? Which 'areas'/territories of power (?) of Crete were involved in the intensification of trading networks? Who were the actors in this multi-wave process, independent entrepreneurs and/or emissaries?

Last but not least, the phenomenon of Minoanisation has always been defined within a very rigid chronological framework and acknowledged *tout court* with the Neopalatial era. However, Cretan cultural traits were already circulating around the Aegean during the first part of Middle Bronze Age! Even for the Neopalatial era itself, it is incumbent on us to interrogate Minoan cultural traits abroad in light of different scenarios that the Neopalatial era represented on Crete: MM III, *i.e.*, a complex, multi-varied and non-homogeneous transition to a new concept of power and policy (Macdonald and Knappett 2013); LM IA, *i.e.*, the period of intensification of political and social networks under the expansion of the Knossian polity, surely in central and east Crete; LM IB, *i.e.*, the period following the Theran eruption to the end of Neopalatial on Crete, during which Crete underwent major changes in material culture, administrative systems, and political and social structure (Brogan and Hallager 2011). It is only through this perspective that one is encouraged to formulate hypotheses concerning the forces that were promoting such interaction and when it occurred. The traditional idea of the Neopalatial era as a monolithic chronological and political block, when Crete reached its acme of power and its empire, undisturbed, governed the Aegean Sea, has inevitably produced the implicit default assumption that human mobility from Crete across the Aegean was politically motivated and organized by elite groups. Regardless of this viewpoint's validity, it does not preclude co-existence of a parallel scenario where small-scale, economic and kinship-driven decisions catalysed the intensification of interaction between Crete and several parts of the eastern Mediterranean.

### ***Mycenaean and Mycenaeanisation***

The term *Mycenaean* and its adoption have had a much different history than the term Minoan, one in which ethnicity, and more specifically Greek ethnicity, was embedded (Dickinson 1977; Bennet 1999; Feuer 2011). The term 'Mycenaean' was originally designated to indicate the people from Mycenae, but was expanded to define two things: the people of the Southern Greek Mainland who spoke Greek and wrote it by using the Linear B script, and the assemblage of artefacts and practices that were associated with these people. This cultural grouping emerged during the end of the MH and beginning of LBA, and some of the practices and material culture that were associated with it spread across the Aegean during LH IIIA and IIIB.

Even though this designation started as a culture historical

term that characterized the culture, it later became evident that the ‘Mycenaeans,’ or at least one of the polities, were indeed recognised by neighbouring cultures. The contemporary Hittite (Bennet 1999; Beckman *et al.* 2011; Kelder 2012; as well as other papers in *Talanta* 44: Recent Research and Perspectives on the Late Bronze Age Eastern Mediterranean) and Egyptian states (Bennet 1999; Cline 2009; Kelder 2010) seem to have recognized the Mycenaean state(s) and called them two different names, Ahhiyawa and Tanaju respectively, even though the references are vague and unclear in terms of who these people were or where they were located. It is equally unknown what term the Mycenaeans were using for self-identification, or even if they recognized what we think today as Mycenaean kingdoms as belonging to the same collectivity of sorts (for further discussion, see Bennet 1999; Feuer 2011, 509–510).

Even when acknowledging these uncertainties, the use of the term Mycenaean carries one more major implication, in that it does not describe an inclusive collectivity, but an exclusive group of people, *i.e.*, the elite (Bennet 1999). In a recent book on prosopography and the study of individuals, Nakassis (2013)<sup>2</sup> shows that the Mycenaean state should be regarded as a network reproduced by the actions of individual agents (mostly elites with substantial land holdings) instead of thinking of it as a rigid hierarchy of offices or bounded homogeneous entity. Even the Hittite and Egyptian texts referred to above make reference to diplomatic exchanges and relationships between their state official and the upper echelons of the Mycenaean state, if not the tip of the social pyramid. Likewise, artistic representations, and especially palatial frescoes, represent a special palimpsest where the *wanax* ideology and/or the opposition between ‘Mycenaeans’ and the ‘others’ is materialised (Bennet and Davis 1999). This inevitably creates a problem when defining Mycenaean culture in the archaeological record and the spread of Mycenaean culture across various regions (*i.e.*, Mycenaeanisation). Since the cultural diacritics that have been connected to Mycenaean identity are associated with the *wanax* ideology and the ruling class (Kilian 1988), more so than in the Minoan case, becoming Mycenaean becomes virtually impossible for a vast cross-section of the Aegean population.

These difficulties notwithstanding, many scholars have tried to comment on the spread of the Mycenaean culture and influence (or just their ceramics) over the rest of the Aegean since the end of the 19th century when the first Mycenaean, alongside Minoan, pottery started surfacing in the excavation of Phylakopi (Mackenzie 1904), away from the ‘heartland’ at the time, which was the Northeast Peloponnese and Central Greece. Much like the Minoans, Mycenaeans were deemed the next conquerors of the Aegean, including Crete, and were considered much more imperialistic than their predecessors, if their love of warfare artistic themes has any bearing on how they conducted their

political business (a connection of course which is fraught with problems just as much their peace and flower loving counterparts from Crete; cf. Molloy 2012). As Schallin (1993, 5–6) notes, MacKenzie’s initial interpretation of Mycenaeans as the overlords of the Aegean, *i.e.*, that Mycenaeanisation essentially had a close relationship with political control, has been shared by many scholars, such as Scholes (1956), Caskey (1969, 442), and Barber (1974; 1999). Others (*e.g.*, Sherratt and Sherratt 1991; Knapp and Cherry 1994; Mountjoy 1998; Mountjoy and Ponting 2000), envisioned a Mycenaean role that centred mostly on trade, rather than political control, whereas Schallin herself (1993; 1998) rejected both hypotheses, especially as far as the Cyclades are concerned, stating that there was no strong Mycenaean control of the political or economic kind, but a loose connection (resembling peer polity interaction) based on kinship reciprocity and gift exchange that allowed the small-scale societies of the Aegean, which were lacking strong central authority, to be influenced by their more prestigious partners on the Greek Mainland.

Recent commentaries on Mycenaean expansion seem to take a different theoretical stance and different preferred spatial contexts compared to discussions on Minoanisation. Whereas the Minoanisation discourse as of late has focused on the Aegean and has been influenced by post-colonial theory and agentic approaches, discussion of Mycenaeanisation has been framed primarily within a world-systems theory context (Parkinson and Galaty 2007; 2009; Feuer 2011), and more recently hybridisation (Voskos and Knapp 2008; Stockhammer 2012b). As for its spatial context, discussion on Mycenaeanisation has focused on Cyprus and the Levant (Sherratt and Sherratt 1991; Knapp and Cherry 1994; Sherratt 1999; 2005; 2013; Steel 2004; Knapp 2008; Voskos and Knapp 2008; Hitchcock 2011; Jung 2011; 2012; Stockhammer 2012a; 2012c; 2013; Hitchcock and Maeir 2013; 2014) and the Central and Western Mediterranean (Kilian 1988; Vianello 2005; Borgna and Càssola Guida 2006; Bettelli 2011; Iacono 2013; Jung and Mehofer 2013; Jones *et al.* 2014), whereas the Aegean remained surprisingly understudied (with few exceptions, Schallin 1993; 1998; Wardle 1993; Mountjoy 1998; 2008; Jung 2010; Feuer 2011). Several scholars seem to have taken Mycenaean influence and expansion for granted, which is evident in “thinly substantiated assertions of a permanent physical presence of ‘Mycenaeans’” (Girella and Pavúk this volume) and it is only recently that discussion has moved beyond this interpretive possibility, discussing especially the Early Mycenaean period (Maran 2011; 2013; Pavúk and Horejs 2012; Maran and Van de Moortel 2014).

The discussion presented by the papers collected in this volume shows that interaction between the Aegean polities and their Mycenaean counterparts was far from homogenous and varied across time and space according to a balance between local initiatives and needs as well as

Mycenaean motivations (geopolitical, social, economic etc.). Finally, any search for Mycenaeanisation as a well-bounded, homogeneous, and monolithic process is consistently hampered by the variation between the Mycenaean states and the variability in the reaction of the communities they interacted with.

### Beyond Thalassocracies: The Structure of this Volume

A large proportion of the papers in this volume focus on individual communities or regions of the Aegean, comparing and contrasting the phenomena from very intimate and local perspectives. This approach, we think, captures the essential character and transformations in each community and highlights the affordances of their cultural and other alliances over time. The papers address different areas of the Aegean, which we consider to be in essence borders or frontiers of some sort. Borders or frontiers are ideal zones of interaction and constitution of identity, as they are also special spaces in which to experiment with cultural mixture, and where to encounter, to adopt or to appropriate aspects of the ‘other’s’ culture (White 1991; Cusick 1998, 6–7; Hall 2000; Malkin 2002). Therefore, most of the papers deal with these liminal zones and offer a complex scenario at several levels of integration to palatial societies, whereby Minoan and Mycenaean cultural traits are adopted, incorporated and reformulated (to varying degrees, of course). Moreover, the wide timespan and the geographical diversity of the areas discussed enable the authors to search for temporal and spatial variability of the two processes and prevent them from being treated as monolithic blocks or cultural packages.

The papers engage at various degrees with problems of cultural contact and mixture by adopting models derived from postcolonial studies, such as hybridity (Bhabha 2007; Voskos and Knapp 2008; Stockhammer 2012c), transculturalism (Hitchcock 2011), and entanglement (Hodder 2011; Stockhammer 2012a; 2013; Hitchcock and Maeir 2013). It is important to stress that, in spite of the conceptual and epistemological differences in using one term instead of another, all of these terms incorporate aspects of agency as well as the multidirectional transfer of cultural traits during the encounter between cultural entities. It is equally significant that these concepts downplay the power differentials between the parties involved in these encounters; while power differentials are important considerations, we do think that sometimes they overshadow other aspects of this process. Moreover, papers discuss agency, mobility, as well as transformation (*i.e.*, objects, technologies, and modes of production), appropriation and incorporation of artefacts (Hahn 2005, 102–104; Stockhammer 2012a; 2013) and change in their semantic value (Appadurai 1988; Helms 1988; 1992; Gosden and

Marshall 1999; Gosden 2004). Nevertheless, this book does not aim to adopt one specific conceptual framework and remains programmatically devoted to a range of interpretive avenues (as one can gauge from the variety of approaches the authors have utilised).

The first paper of the volume focuses on the NE Aegean. Although there is a risk that what we see is mostly due to the archaeological bias and/or accident of preservation, the paper by Luca Girella and Peter Pavúk (Chapter 2) discusses the striking case of the Northeast Aegean, which furnishes evidence for the earliest engagement between the Minoan world and the Aegean in the MBA (*i.e.*, Mikro Vouni on Samothrace). This contact with the ‘Minoan world’ did not produce sweeping changes in the local NE Aegean habits, a situation which is markedly different from that in the southern Aegean, and in the Cyclades in particular. Yet, this interest of sorts (or even a direct Minoan presence) might have acted as a catalyst that spurred the region to form a larger aggregate, as the authors have identified a horizon during which a distinct ceramic hybrid culture was being produced not only on the islands but also on the Anatolian coasts. Mycenaean interest generated different local responses, which might have been owed (at least in part) to the different ways of organizing and controlling trade employed by the ‘Minoans’ and ‘Mycenaeans.’ While the material culture of the NE Aegean islands shows a degree of resistance by the local population against traits of Minoan origin, the degree of interaction and cultural engagement with the Mycenaean ‘centres’ intensified in the second period of interest to this volume. Settlements and cemeteries on the West Anatolian coast are also discussed (*e.g.*, Troy, Panaztepe, Liman Tepe, Çeşme and Baklatepe).

Jana Mokříšová (Chapter 3) take us a little to the south as she attempts to gauge the connections of the Anatolian littoral sites with the Aegean world from a perspective that uses mobility of people (rather than artefacts only) as a heuristic device explaining cultural transmission in the Late Bronze Age. This is a perspective that has been missing from the discourse, which has prioritised explanations such as trade and elite emulation. In general, she finds that Minoanisation and Mycenaeanisation should be attributed primarily to “small-scale and frequent, semi-permanent and/or permanent mobility of diverse groups of people,” since, so far, Miletus (and other sites, for that matter) has not produced good evidence for segregation in the use of local and non-local wares and/or practices. On the contrary, the world of the Anatolian littoral and the Aegean was “an interconnected milieu of familiar places and people, a shared knowledge base, and commensurate economic systems,” which allowed for the permeation of fashions and different ways of representation, which should be necessarily associated with Minoan or Mycenaean settlers.

Amy Raymond, Ivonne Kaiser, Laura-Concetta Rizzotto, and Julien Zurbrach focus on Miletus (Chapter 4), a key

site in the Aegean trade and exchange network with a rather unusual character, having been not only a residential community (especially in the first part of LBA) but also the focus of religious and industrial activities, as well as a border zone where the world of the Aegean came into contact with the polities of inland Anatolia. During the Minoanising phase local interests seem to persevere and there is a wide variety of cultural mixture in the area, which produced at least one hybrid shape. Yet in the Mycenaeanising phase, which the authors break into a two-step process, Miletus seems to undergo an overhaul of sorts with evidence for discontinuous change in terms of the function of the site (no longer a centre for cultic activity) and the character of local ceramic production which emulates very closely Mycenaean fashions no longer showing any interest in ‘indigenous shapes,’ save two exceptions.

A similar scenario is offered by Salvatore Vitale (Chapter 5) who approaches Minoanisation and Mycenaeanisation on Serraglio (Kos) mainly from a ceramic point of view. Vitale shows that, although the site was clearly connected to the ‘new environment’ of the Aegean world and Crete (especially the eastern part of the island), local craftspeople engage with Cretan fashions, and incorporate them in a way that is both eclectic and a continuation of local tradition, probably as a special strategy to compete along the maritime trade routes of the Aegean (*e.g.*, LoD/DoL pottery). In general, the flirtation of the site with the Minoan cultural sphere was a relatively brief phenomenon of “cultural entanglement and ideological exchange,” probably lacking the intensity and breadth of engagement of a site such as nearby Trianda on Rhodes (a significant settlement in the region which has not been presented in this volume). Starting in LBA IB, material culture betrays a gentle non-discontinuous shift and reorientation of the cultural focus of the island. Starting in the next phase and continuing thereafter, Seraglio offers evidence for material culture and practices connected to the Mycenaean world and perhaps to Mycenaean identity, to the extent that “during the phases from LH IIIA2 to LH IIIC, a significant part of the Koan community was composed of peoples who considered themselves ‘Mycenaeans’ and were presumably perceived as Mycenaeans by their neighbours.”

The next four papers are devoted to the Cyclades, which were effectively sandwiched between the Minoan and Mycenaean ‘heartlands,’ and yield the potential for observing the interaction between the two antagonists in this liminal zone. Jason Earle (Chapter 6) demonstrates how the spread of Minoan and Mycenaean culture traits at Phylakopi are evident in various categories, from pottery to architecture, from religion and administration to personal adornment. The Minoanisation and Mycenaeanisation at Phylakopi appear to have been controlled by elite groups, especially if architecture and cultic practices are considered. Nevertheless, if ceramic consumption is in any

way correlated with local identity, then the Minoanisation of ceramic assemblage was a gradual process, which may have encountered some resistance as producers choose to keep the local idiom distinct from non-local imitations with the development of distinct wares for them. On the other hand, Mycenaeanisation of shapes seems to be a much less ‘contested’ process. Last but not least, administrative practices show that if presence of writing is associated with degree of autonomy in trade and exchange dealings, the presence of Linear A and the absence of Linear B in Melos (as well as in almost all of the sites discussed in this volume, except perhaps Miletus) are notable.

Evidence from Naxos discussed by Andreas Vlachopoulos (Chapter 7) paints a different picture. During the MBA and early LBA, the island seems to have been densely inhabited and in contact with Thera, Melos, Kea, and Crete, as attested by Cretan imports and drinking practices (*i.e.*, conical cups) as well as the significant recent discovery of the Naxian pithoi inscribed with Linear A from the Temple Repositories in Knossos (Christakis 2010). Yet, a ‘Minoanised’ settlement, such as the ones on the aforementioned islands, has not been located, a situation which might be an accident of preservation or archaeological research, and/or might be a symptom of the preservation of “the independence of [its] insular dynamic” even though it was “affected by the powerful cultural spheres of the time,” as Vlachopoulos concludes. On the contrary, the author finds that during the LH IIIA–B, because of the intensification of Mycenaean presence, “the Aegean was a uniform sea of homogeneous civilisation and a bridge towards the East and Cyprus with its copper ores, regions that reinvigorated the mercantile activity of the period” even though a claim for the political integration of the Aegean cannot be supported. Also, in contrast to the MBA and early LBA, Naxos seems to become a centre in its own right rivalling Phylakopi on Melos, with a major fortified settlement in Grotta and a tholos tomb in Chostí; in particular the fortification, which has parallels in Boeotia and Tiryns, only underlines the importance of and interest in the island in terms of trading with the Eastern Aegean and Mediterranean. The prosperity of the island, and its concomitant Mycenaeanisation, continues and perhaps intensifies in the 12th and 11th c. BC, even though, as the author underlines, this did not mean de-Naxianisation.

Ayia Irini material culture, as discussed by Evi Gorogianni (Chapter 8), problematizes the perception of local vs. foreign in the context of a very small and multicultural community, such as Ayia Irini, and firmly associates cultural change with small scale population movements (as evidenced in pottery and textile production practices) rather than by any other top-down process. Yet the fact that “this cultural mix did not produce an entirely distinctive cultural idiom but continued to operate within the confines of a Minoan inspired koine in the Aegean” shows that the community did not operate in a cultural vacuum but was firmly integrated with the

fashions prevalent in the Aegean world, where Cretan styles and practices were clearly the cultural vocabulary of power. This vocabulary of power seems to find its more intense usage at Ayia Irini during Periods VI and VII, which are also the periods that evidence the growing interest of Mycenaean groups in the metals trade, and the subtle and negotiated rapprochement between them and the site's competing groups. This rapprochement, as well as the encroachment in, and the reorganisation of, the metals trade by Mainland agents seemed to have significant impact on local ceramic production as well as on the connectivity of the site with the rest of Aegean, and perhaps resulted in the final abandonment of the site as a place of residence at the end of Period VIII (LH IIIA), not allowing us to witness the cultural transformations at their most diagnostic in LH IIIB and LH IIIC. All in all, Mycenaeanisation at Ayia Irini appears to be a much more elite strategy than Minoanisation ever was.

Natalie Abell and Jill Hilditch (Chapter 9) arrive at similar conclusions when focusing on the ceramic production of Akrotiri, Ayia Irini, and Phylakopi, approached from a technological and 'practice' perspective which allows the discussion of the active roles of non-elite people in enabling and promoting cultural transmission. This exploration of the three sites showcases that Minoanisation of the ceramic assemblage was not a top-down process, as the adoption of the potter's wheel seems to become fully embedded within the local potting practices, albeit in markedly different ways, and required direct and sustained contact between potting communities in the Aegean and Crete. In contrast, Mycenaeanisation has much more discontinuous effects on local potting traditions, as, at least in the case of Ayia Irini and Phylakopi, it results in the almost complete cessation in the production of fine decorated wares, which were imported. If craftspeople were agents of the Minoanisation of material culture in the Cyclades, the same cannot be claimed for their counterparts during the LC II and LC III, which is credited without a doubt to "the different production and exchange strategies on the part of Mycenaean palaces in comparison to Minoan ones."

Joanne Cutler (Chapter 10) discusses these two processes from a different standpoint, that of weaving technology. In doing so, Cutler approaches acculturation from a bottom-up perspective, that of the weaver, as she documents that the transmission of a given Minoan technology, the warp-weighted loom and of discoid loom-weights, and along with that the mobility of its users, *i.e.*, women, and thus "highlights the role of women as both producers and consumers in the 'Minoanising' phenomenon." The spread of this technology in the late MBA and early LBA also meant that Aegean communities (albeit in varying scales) focused on the production of a specific kind of fabric (one that was not as tightly controlled by the palaces, as opposed to the one that was produced by spherical loom-weights) and the

Minoanisation of dress. On the other hand, the limited and late adoption of this type of loom on the Mainland may perhaps betray "resistance to the technology and/or lack of access to the necessary skills," a situation which is overcome with the establishment of the textile industry connected to various Mycenaean palaces. Finally, Cutler also makes note of another technology, spools usually connected with tablet weaving and the production of borders or bands that could be attached to plain tunics, which seems to have been the dress of choice in LM II–III Crete and was probably imitated by Mainlanders but not the residents of the Cyclades.

Bryan Feuer (Chapter 11) then comments on the phenomenon of Mycenaeanisation in Thessaly utilising a core/periphery model (this is the only paper that does not gauge in a comparison between the two '-isations,' as "Minoanisation in southeastern Thessaly ranged from extremely minimal to non-existent"). The author asserts that the acculturation of Thessaly to Mycenaean culture is variable and "can be roughly correlated with equivalent geographical variation," which splits the region into three subregions that "can be characterised as core, border and frontier zones." In the core zone, there were complex administrative centres like Dimini and Iolkos, and social, economic, and political structures not unlike the ones that are found in the Mycenaean centres in the south. In the border zone, Mycenaeanisation was variable with some communities, or probably the elites within these communities (usually in proximity to or in contact with the core zone), and they seem to have adopted many aspects of Mycenaean culture, whereas large agricultural populations "retained a distinctive local identity." Finally, in the frontier region, which coincides with the mountainous area of Pindos, the degree of integration with the Mycenaean world was negligible, with only certain objects (like weapons) with special significance for the local context showing up in the archaeological record of these remote communities.

Last but not least Carl Knappett and Michael Galaty offer us their insightful comments on these papers as well as these processes as a whole. Knappett (Chapter 12) comments on the heterogeneous social, cultural and political processes of Minoanisation and Mycenaeanisation. He argues that both Minoanisation and Mycenaeanisation were distributed, multi-sited and networked processes, whereby both multi-sited and micro-level perspectives adopted by the papers in this volume provide an important tool to understand aspects of human, material and technological mobility. Galaty's contribution (Chapter 13) is a constructive review of the evidence for Mycenaeanisation collected in this volume, but it also contributes to our debate by presenting a specific and yet different case study of cultural contact in Epirus. He argues that Mycenaean contacts in Epirus were made first to support the metal trade. Then, after the collapse of Mycenaean palatial society, unlike other Mycenaean peripheral zones, where the primary trade good

was fine pottery, northwest Greece and southern Albania appear to have attracted industrial-scale manufacture and importation of bronze weaponry. This situation appears to be quite similar to western Achaia (Moschos 2009), where the negotiation of a new power as well as the control of the Adriatic sea-route through the Corinthian gulf played an important role.

## Notes

- 1 See, for instance, the non-Aegean case of the adoption of European dress in Samoa (Colchester 2005).
- 2 The latter has placed great importance on Linear B archival information from the polities based at Knossos and Pylos, and is largely influenced by A. Giddens' structuration theory (Giddens 1979; Blanton 1998).

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# THE NATURE OF MINOAN AND MYCENAEAN INVOLVEMENT IN THE NORTHEASTERN AEGEAN

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## Introducing the Northeastern Aegean

Recently, numerous researchers in archaeology and anthropology have examined the concepts of insularity, island identity (Patton 1996; Broodbank 2000; Rosenstock 2002; Rainbird 2007; Berg 2007), maritime cultural landscape (Westerdahl 1992; Horden and Purcell 2000; Broodbank 2013) and the coastal world (Tartaron 2013) throughout the Mediterranean. Furthermore, social network models, despite being a work in progress for the Aegean (Knappett, Evans and Rivers 2008; Knappett 2011), added comprehensive cultural and environmental variables towards understanding how island networks expand and contract.

Various arguments set forth in these works are borrowed and combined to set an agenda for this paper: (1) Island identity is not the result of a unitary process, rather a process that is constantly modelled and negotiated over time. (2) The relationship between islands and mainlands (Broodbank 2000, 18–25; 2013; Rainbird 2007, 46–67) forces us to reconstruct a complex biography of a constantly evolving cumulative and/or intermittent interaction between the two sides. (3) Island culture is a form of social identity and cultural strategy manipulated and negotiated by islanders before and after mainland groups start showing any interest in them (Broodbank 2000, 33; Berg 2007, 111–151), and so the presence or absence of material culture is quite crucial for the construction of explanatory models of social behaviour (Fowles 2008; Earle 2012). (4) Microregions are the basic units of connectivity (Horden and Purcell 2000, 123), that may coalesce into larger aggregates. (5) Coasts are neither peripheries nor boundaries between land and sea, rather they are places where mainland and island cultures are in communication and are integrated (Tartaron 2013, 7–9).

This paper focuses on the nature of Minoan and Mycenaean involvement in the northeast (hereafter NE)

Aegean within the framework of the model presented above. Geographically, the NE Aegean is not only composed of several large islands (Samos, Imbros, Tenedos, Lemnos, Lesbos, and Chios), but is also characterised by the *proximity* to major continental landmasses, *i.e.* the Western Anatolian coast to the east and the northern coast of Greece (with Macedonia, Thrace and the whole Balkan background) to the north (Fig. 2.1). Furthermore, the *distance* factor also needs consideration, for the islands are relatively far and isolated from the primary regions of Minoan and Mycenaean cultural hegemony: the Dodecanese and the so-called Lower Interface to the south, the Cyclades and Crete to the southwest, and the Greek mainland (mainly the coast of Thessaly) to the west. Or, in other words, for the purposes of the present paper, the NE Aegean will be limited in the East by a north-south line running between the longitude of Thasos-Skyros at the west and Lemnos-Psara at the east. The southern border of the region being covered is just north of Samos (East Aegean islands) and Ayasuluk (Anatolian mainland).

A comprehensive study of the NE Aegean has been hampered so far by intermittent archaeological exploration, mostly linked either with the Greek Archaeological Service or to foreign schools, and by equally intermittent systematic publication (Lamb 1936; Bernabò Brea 1976; Hood 1981; 1982; Kouka 2002). However, in regard to the Minoan and Mycenaean periods scrutinised in this paper, recently there has been a relative upsurge of interest in Minoanisation which has produced a more or less exhaustive portrait of the overall evidence (Matsas 1991; 1995; Guzowska 2002; 2009; Girella and Pavúk 2015; Matsas, Girella and Pavúk 2011), and alternatively an agreement that manifests as indifference for Mycenaeanisation, often as thinly substantiated assertions of a permanent physical



*Fig. 2.1: Map of the northeastern Aegean: settlements and cemeteries (by Peter Demján).*

presence of ‘Mycenaeans’ (Lamb 1930–1931; Benzi 2002, 370–372; Guzowska and Yasur Landau 2003) or as general publications dedicated mostly to specific islands (Spencer 1995a; 1995b).

This paper seeks to unify, systematise, and perhaps smooth some of these obvious peaks and valleys of archaeological interest. More specifically, the following

analysis will scrutinize the progressive interaction of the NE Aegean with the southern Aegean ‘world’, principally the Cretan one, during the MBA and early LBA, as well as with the Greek mainland throughout the whole LBA.

Although many aspects of NE Aegean island archaeology (composition and social stratification of resident groups, colonisation patterns, seafaring activity, maritime travel

ranges, climatic variability) remain in need of a more intense investigation, the data collected and diachronically analysed herein show differing spheres of interaction that make the NE Aegean a particular ‘small world.’ Such interaction is based on the relative proximity between the islands and the west Anatolian coast. At the same time, we shall demonstrate how patterns of connectivity and interaction between the NE Aegean islands and the Anatolian coast fluctuated between MBA and LBA. Furthermore, we show how the archaeological evidence and materiality can be used to understand strategies of incorporation, negotiation with and resistance to the outside world.

In fact, whereas at the end of the EBA and at the beginning of the MBA, the NE Aegean islands share cultural similarities with the NW Anatolian region (*i.e.* Troy IV–V and *Poliochni Bruno* cultures), all of them witness a major change somewhere during the mature and late phases of the MBA (corresponding roughly to MM II and MM III on Crete), leading to the emergence of a new ‘island culture.’ This culture, which is quite different from the Anatolian mainland, shows instead a growing influence from the southern Aegean but it differs from the latter in many aspects. Therefore, one should consider the interaction of the NE Aegean region with the southern Aegean and the Greek Mainland as a process comprising several stages and reflecting different degrees of involvement in the Aegean networks.

Furthermore, we argue that an understanding of migration, acculturation and hybridisation contributes toward helping decode phenomena comprised of multiple processes (Girella and Pavúk 2015; Girella, Gorogianni and Pavúk – Introduction to this volume), especially since interpretative frameworks for studying cultural contacts, acculturation and hybridisation provide different but useful ways of understanding cultural processes. We have already discussed the concept of hybridisation elsewhere as it applies to the NE Aegean (Girella and Pavúk 2015), so it is enough here to remember that the term refers principally to the creation of dynamic mixed cultures. As a concept derived from post-modern and post-colonial studies, hybridity confronts boundaries, although it does not erase them. The concept and its application have been the subject matter of a quite proliferate discussion over the past few years (Bhabha 1994; Latour 2005; Knapp 2008; Voskos and Knapp 2008; Stockhammer 2012; Maran and Stockhammer 2012; Hitchcock and Maier 2013; Steel 2013; VanValkenburgh 2013, 305, fig. 1), leading to shifting terminologies, such as acculturation (Cusick 1998), creolisation (Hall 2010), transculturalism, and the more recent appearance of entanglement (Stockhammer 2012; 2013; Steel 2013, 50–90; VanValkenburgh 2013, 310–311, fig. 2). In our view, there is no reason to abandon the use of hybridisation for the NE Aegean, especially because, as we demonstrate in this paper, it provides a very good framework for examining four

aspects that differentiate it from other parts of the Aegean: (1) the active response of the local population (more active in the north than in the south); (2) the expression of resistance to the incoming culture; (3) the emergence of a whole new ‘culture’, as opposed to the creation of singular material cultural traits which are well visible in other parts of the Aegean; and finally, (4) not unlike in biology, a tendency towards sterility: the new hybrid culture does not show any internal development and yields no successors.

Rather than a single idea or a unified concept, hybridity is an association of ideas; it is therefore important to situate any discussion of hybridity in a specific context, where the conditions that shape it are addressed.

### Chronological Definitions and Periodisation Used

The paper is organised in two parts: the ‘Minoan’ section covers roughly the Middle and the beginning of the Late Bronze Age, where the ‘Mycenaean’ part then begins. The upper chronological limit is then set deliberately by the fall of the Mycenaean palaces, which is a major game changer. The LH IIIC period would deserve a thorough discussion on its own, almost equally as long as the previous two, but would be both beyond the page limit of the present paper and the experience of the authors.

Perhaps more importantly, two different systems of periodisation will be employed in the two parts: a new one (explained below) for the discussion of the Minoanisation, and the traditional ‘Furumarkian’ one for the process of Mycenaeanisation. The main reason for this choice is the fact that the two processes show different dynamics and developments in this area. Whereas the traditional ceramic sequence usually applied to Minoan culture – although still useful for dating of single artefacts – turned out to be weaker when interpreting wider phenomena and processes, the process of Mycenaeanisation did not allow for a similar new periodisation.

Selected Minoan cultural traits have been incorporated or rejected at various cognitive and practical levels into the contemporary local island cultures and a more detailed look at their relative chronology shows that what we witness is not a singular event but a process, spreading over a period from MM II to LM I, and occurring at different times at different places. Focusing on the dynamics of the local histories, and in order to explain better the phenomenology of the NE Aegean island contacts, three main stages of ‘Minoanisation’ are proposed in this paper: ***pre-contact***, ***contact*** and a ***hybrid*** stage. This terminology principally reflects our pottery-based approach on Samothrace/Mikro Vouni (Girella and Pavúk 2015; Matsas, Girella and Pavúk 2011).

However, this 3-staged framework should not be understood in a strictly chronological sense, since the stages

are not completely synchronous from island to island, and are not represented on all islands/sites. The main point is that the evidence can work in different ways on islands other than Samothrace, where the shift between the *contact* and *hybrid stage* might not be as clear, either due to depositional processes or to dynamics of contact networks. Thus, the difficulty in recognising a *contact stage* on a given island/site, especially in the later part of the MBA, and in the face of a more pronounced *hybrid stage* on most of the islands, might suggest a different mechanism of cultural influence and transmission between the islands, one that is only indirectly related to Crete.

Having established such a new tripartite system for the process of Minoanisation, to our relative satisfaction, we tried to apply it also to the Mycenaeanisation evidence at hand. However, that did not work at all! Indeed, the nature of the evidence from settlements and tombs is mostly tied to the Mycenaean ceramic evidence. Thus, the traditional ceramic phasing will be used for discussing the Mycenaeanisation process.

### The Dynamics of Minoanisation in the NE Aegean

In the words of Cyprian Broodbank, Minoanisation is “a heterogeneous range of ancient material culture traits and practices that indicate the adoption in places beyond Crete, through whatever means, of ways of doing things that originated directly or indirectly within that island. Examples include artefact styles and consumption, cooking habits, writing, weight system, weaving, wall-paintings, design and use of built space, burial practices and ritual action” (Broodbank 2004, 46). Such a compelling statement arrived only after many years of a long debate striving to explain one of the major cultural processes between MBA and LBA, a period when many sites across the Aegean started sharing a set of specific cultural traits within the context of a growing scale of interaction and likely under the driving force of the palatial site of Knossos. The debate about Minoan presence outside of Crete started with Sir Arthur Evans (1935, 283, 754–755), but it received particular impetus during the 1980s, oscillating between various interpretative models, ranging from forceful colonisation to a more active role of the local cultures (Furumark 1950; Rutter and Rutter 1976; Branigan 1981; Cherry 1981; Davis 1979; 1980; 1982; 1984; Wiener 1984; 1990; Davis and Gorogianni 2008; Macdonald, Hallager and Niemeier 2009). Significant developments in the re-evaluation of the local cultures arrived with the application of scientific analysis (mainly petrography) on material cultural traits (Kriatzi 2003; Marketou *et al.* 2006; Broodbank and Kriatzi 2007; Knappett *et al.* 2011; Hilditch, Knappett, Power and Pirie 2012) and the application of network analysis (Knappett 2011; Knappett, Evans and Rivers 2008).

### Pre-contact Stage

In the northeastern Aegean the pre-contact stage is largely coincident with the earlier part of the local Middle Bronze Age, but its length varies from island to island, given the differing appearance of the first Minoan imports. In general, the local MBA culture is exemplified by the Poliochni Bruno culture on Lemnos and the Troy V on the nearby Anatolian coast, but again, it differs slightly island-by-island. The pre-contact stage is characterised by a lack of imports and develops more or less directly out of the local EB III (Troy IV). At least on Samothrace at *Mikro Vouni*, we have clear evidence for the use of the potter’s wheel already at the beginning of MBA, interestingly for the production of only one shape (the hemispherical bowl), which is produced *en masse* and seems to have been the main drinking shape. Possible Cycladic imports identified at Samothrace are few but if true, their presence would match nicely the evidence from early Koukonisi IV levels at Lemnos, where Boulotis identified imported Cycladic hut-like vessels (Boulotis 2010, 899).

On Lemnos, the Poliochni Bruno culture from the eponymous site seems to be well rooted in the local ceramic development related to Troy V (Bernabò Brea 1976, 315–331). Period IV at *Koukonisi* seems to embrace almost the entire MBA (Boulotis 2009, 181–183) and is set apart from the following Period III by an extensive earthquake. Several sub-phases were distinguished based on architectural modifications (Boulotis 2009, 182). It seems that the flow of imports increases only at the end of Period IV, when Minoan and other imports are documented (see *infra*). The information about settlement organisation in this period comes mainly from Koukonisi, and fills neatly the almost complete gap of evidence from *Poliochni* (but see Cultraro 1997, 686–687). From what one can tell, the settlement of Koukonisi IV succeeded the previous EBA settlement but with a different orientation, apparently without a break (Boulotis 2009, 181).

On Lesbos, as on Lemnos, the pre-contact stage seems to characterize most of the MBA, but it is not well represented. The restudy of material at Chios indicates that the site of *Emporio* was possibly deserted during the MBA, the hiatus starting already at the end of the EBA. At *Troy*, the first Minoan imports appear only in phase VIa (see *infra*), whereas Troy V culture shows a strong Anatolian character and has few external contacts (Pavúk 2005; Blum 2012). The pre-contact stage at Troy would thus be Troy V.

### Contact Stage

The contact stage is not a synchronous time-slice, but covers differing chronological periods on the islands and is therefore not easy to grasp.

Samothrace shows the earliest stratified evidence of Minoan imports, contemporary with MM II on Crete. At

*Mikro Vouni* we observe significant shifts in the pottery assemblage, such as the introduction of new shapes in local wares, the imitation of Minoan shapes, largely functional ones but also table shapes, and the presence of other imports (Girella and Pavúk 2015). Notable also is the introduction of Minoan type loom-weights (Matsas, Girella and Pavúk 2011) and stone vessels (Matsas 1995, Pl. XXXV b). However, the truly impressive part of Minoanising Samothrace is the adoption of Minoan administrative systems (Matsas 1991, figs. 5, 8, 15–17; 1993; 1995, Pls. XXXIV, XXXV e, XXXVI–XXXVII a–c; 2004.). The ongoing study of pottery and stratigraphy of the settlement seems to confirm that the adoption and use of the majority of the documents (roundels, nodules and the seal) belong to this contact stage, contemporary with the late Protopalatial period on Crete (Matsas, Girella and Pavúk 2011).

The case of Lemnos, and *Poliochni* in particular, has recently been used as a clue to a possible connection with Crete during MM II, as the fabric group of one lentoid flask from Kommos (Building AA) is closely related to one of the Poliochni fabrics (Van de Moortel 2010, 880–882).<sup>1</sup> A typologically Protopalatial Minoan stone vessel comes possibly from *Myrina* on Lemnos (Bernabò Brea 1976, 304, fig. 175; Cultraro 2005, 243, Pl. LXIII b). Not chronologically clear so far is the first appearance of Minoan pottery at *Koukonisi*, consisting of a few egg-shell sherds dated by the excavator to MM II–IIIA and put in an advanced stage of Period IV (Boulotis 2010, 900). It is only at the very end of Period IV at Koukonisi that numbers of imported wares start rising significantly, namely Grey Ware (Petrakis and Moutzouridis 2010), Aeginetan Matt-Painted Ware, and Mainland Bichrome (Boulotis 2009, 182–183, note 55; 2010, 899, figs. 3, 5–7, 8a), all contemporary either with MH III or the beginning of the LH period.

The evidence from the island of Imbros (Gökçeada) is not conclusive either. The single supposedly Minoan sherd reported from *Yuvalı* (*Pyrgos*), situated in the SW part of the island, could point to some kind of direct contact; the Minoan connection to the island is perhaps related to the production of pottery similar to that from Samothrace (Harmankaya and Erdoğa 2003, 463, figs. 1 and 10; Matsas 2006). The nearby island of Tenedos (Bozcaada) yielded possibly a Protopalatial hematite seal (Boulotis 2009, 177; Cook 1925, 663, fig. 602). Lesbos has yielded so far only one fragment of a semicoarse transport vessel from *Thermi*.<sup>2</sup>

Unlike its predecessor, the material culture of *Troy VIa* shows strong contacts with MH III Central Greece (Pavúk 2007; 2012; 2014). The interesting aspect of this process is that the interaction with the Greek mainland seems to have by-passed the NE Aegean islands. At the same time, Minoan imports at *Troy VIa* are not numerous by any means: the MM IIIA Creamy-bordered Style juglet found in one cist grave (Korfmann 1997, fig. 37; Pavúk 2007, Postscript; Girella 2014) is rather an exception, accompanied by just a

handful of semi-coarse and coarse medium sized transport vessel fragments.

A few singular items out of original context aside (pendant mould, one loom-weight and a fragment of a lamp), *Emporio* on Chios does not offer much for any definition of a contact stage (Hood 1982, 632–633, 646, 654, figs. 285: 29, 289, 293: 39, pls. 132: 29, 137: 39). It could have been there, but no clear deposits assignable to such a stage remained preserved. Most of what we have will be thus described in the next section.

The same applies also for the Urla peninsula just across the straits. Evidence for any Minoanisation at *Limantepe* is currently limited to the presence of several loom-weights (Erkanal and Keskin 2009, 105, fig. 15.), and possibly a deep spouted bowl, with parallels on Crete in late Pre- and Protopalatial periods (Erkanal and Keskin 2009, 105, fig. 14).<sup>3</sup>

At *Çeşme-Bağlararası* the contact stage is possibly represented by the phases ÇB 2a–2b, dated by the excavators as contemporary with MM III on Crete (Şahoğlu 2007, 310; Erkanal and Keskin 2009, 99, table 1). However, there are not many imports. Purely Minoan seem to include a cylindrical ivory stamp seal from a ÇB 2a context (Erkanal and Keskin 2009, 102, fig. 7, note 10); intriguing is also an almost complete footed vessel with mottled flaking black slip and four horizontal handles on the belly found in phase ÇB 2b (Şahoğlu 2007, 316, fig. 7; Erkanal and Keskin 2009, 101, fig. 5). Fragments of other vessels with similar fabric and surface treatment came to light in the same context. Along with these, a group of perforated “lids for incense burners” was found, which, if indeed of such function, would possibly also point to some Minoan influence (Şahoğlu 2007, 316; Erkanal and Keskin 2009, 102, fig. 9). The shape of the footed vessel is highly unusual and since no other closely datable imports belonging to phase ÇB 2 have been presented so far,<sup>4</sup> its dating – contemporary with MM III – has perhaps been based on the flaking quality of its surface. The local pottery, on the contrary, fits very well the Central West Anatolian pottery spectrum, with numerous trefoil-mouthed jugs, hemispheric bowls and large jars with human faces (Şahoğlu 2007, figs. 4–6).

The well preserved architecture shows an insular layout, which immediately reminds one of EBA settlements, such as Poliochni and Thermi. However, since we do not have many other excavated contemporary sites in the area, it is hard to interpret the layout so far. For example, the contemporary Liman Tepe (Levels III-4 and III-3) seems to be composed rather of free standing oval buildings (Günel 1999, 44–45, figs. 2–6).

### Hybrid Stage

The hybrid stage on Samothrace covers the final part of the MBA and likely also the beginning of LBA (Girella

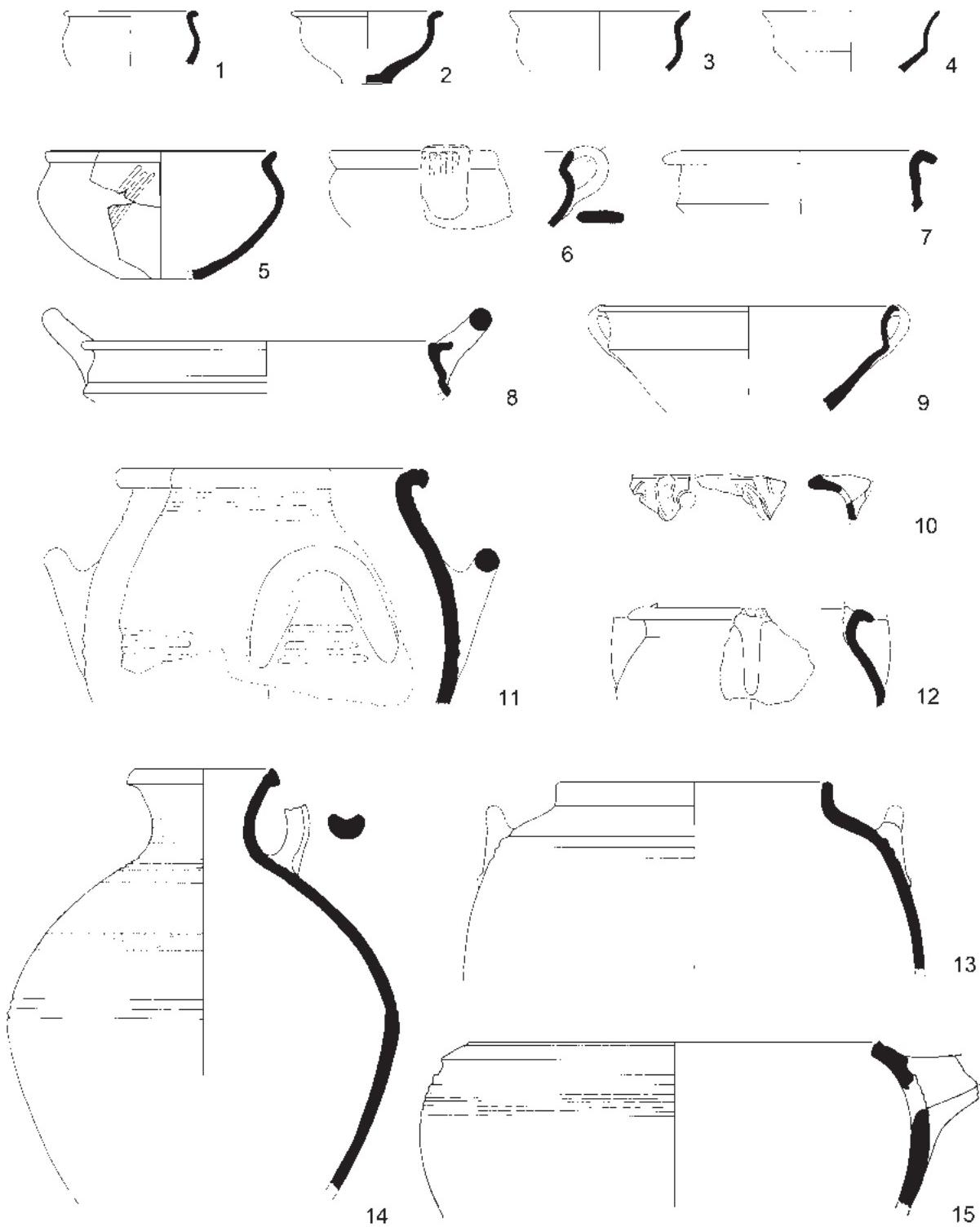


Fig. 2.2: Troy VIb/c. Hybrid shapes in imported Wares reflecting the typological range in the NE Aegean, Scale 1:5 (after Pavúk 2014).

and Pavúk 2015; Matsas, Girella and Pavúk 2011). Cretan imports date mostly to MM III but their percentage is definitely lower than in the previous stage. In contrast, a whole range of new shapes in local wares now appears,

which are not exactly like anything known from Crete, but seem to be local creations, and will be termed *hybrid* here (*cf.* Fig. 2.2). A good example is the white painted decoration on semiglobular cups, which are now produced

in great quantities at Mikro Vouni and are exported also to Troy (Pavúk 2005, Pl. LXVa). Standard imitation of Minoan vessels does, however, continue for a few domestic shapes; interestingly, it is only now that we have for the first time a few specimens of conical cups, a shape otherwise almost entirely absent from the site. This stage is characterised also by a whole range of new imported wares and continued industrial activities, such as weaving, and bronze and stone working (Matsas, Girella and Pavúk 2011).

The scanty evidence from *Poliochni* on Lemnos shows a certain degree of Minoan influence on the local culture, but the evidence is still blurry and not well stratified. Minoanising aspects are clearly demonstrated by the well-known package of hole-mouthed jars, conical cups and technical shapes (*e.g.*, scuttles) in local wares (Bernabò Brea 1976, 338, Pl. CCLXXXIIb, e, g–j). The hybrid shapes, however, are actually not well represented, though good examples include a complete tea pot from square 106 (Mendoní 1997, 152, fig. 1), and a spouted crater from the well in square 106, as well as other related fragments (Bernabò Brea 1976, 337, fig. 178, Pl. CCLXXXII c, f). As for other imports, Bernabò Brea assigned to his Violet period a handful of matt-painted sherds (Bernabò Brea 1976, 338, Pls. CCLXXXIII d–i, k–l), not necessarily coming from the Greek mainland. Given the weak stratigraphical evidence, we are tempted to see at Poliochni all these ‘Minoanising’ and hybrid elements as belonging to the Violet phase of Bernabò Brea and date them to the beginning of LBA, possibly even earlier at the very end of the MBA. The absence of proper stratigraphy makes it hard to determine an accurate chronology for which shapes were actually in contemporary use.

Period III at *Koukonisi* is characterised by the construction of new buildings directly on top of those of the previous period. A wide spectrum of pottery and artefacts suggests that Period III covered mostly the end of the MBA and the beginning of the LBA, *i.e.* MM III to LM IA (Boulotis 2009, 184). The excavations have demonstrated the existence of areas devoted to household and industrial activities, even a metal workshop active at the very beginning of the LBA (Boulotis 2009, 195–202, figs. 20–24). The pottery production shows an increasing Minoanising character towards the end of Period III with a large variety of wares: imported Cretan LM IA, other imported Dark-on-Light-Wares, southern Aegean or possibly Cycladic pottery, and imitations of Minoan shapes in local wares, mostly domestic shapes. Hybrid shapes, though as yet not specifically published, are represented as well (Boulotis 2009, figs. 9h–i, 23a, 24a).

At *Troy*, the hybrid stage should correspond to architectural phases Troy VIb/c and shows some interesting characteristics. On the one hand, the range of Minoan imports remains stable and low, as seen in the preceding period; on the other hand, the local culture suddenly shows

stronger contacts with the nearby islands than is apparent during Troy VIa (Pavúk 2005; 2007; 2014, Pl. 108). The latter phenomenon is well illustrated by the existence of imports directly from Samothrace and other islands, showing a distinctive range of shapes and production techniques that fit very well with the hybrid shapes postulated above for Samothrace (Fig. 2.2).

On Lesbos, the re-study of the 2nd millennium material from *Thermi*<sup>5</sup> is proving that, though not overtly Minoan, the MBA settlement displays a certain degree of Minoanisation (Lamb 1936, 146–148, Pls. XVIII: 635, 636, 627, 610, 614–615, X; XIX: 642). In particular, likely at the end of the MBA, Minoan shapes such as conical cups and tripod pots (Lamb 1936, 137, 146, Pls. XVIII, 610, 614–615; XIX: 642), and hybrid shapes (Lamb 1936, 137–138, 146–47, fig. 40: 5, 12, 13, 15, 17, Pl. XVIII: 611, 613, 635–636) do occur (Fig. 2.3). One should stress especially the presence of the so called *tea-pots*, some of which are decorated with white matt paint, encountered already in Mikro Vouni, Troy, and Koukonisi (Lamb 1936, fig. 41: 6–9).

One can also assign to the hybrid stage the material from *Perama*, *i.e.* a few almost complete rounded and straight-sided cups published by Bayne (1963 [2000], figs. 30: 3, 31: 5–8.) and now stored in the Study Collection of the British School at Athens, likely datable to LM I–II. Spencer (1995b, 13–14) mentions these under Chalases and dates them to MM III. These vessels have parallels at Thermi (Lamb 1936, Pl. XVIII: 610, 627; Bayne 1963 (2000), fig. 32: 3–8) and Emporio (Hood 1982, 599, fig. 269).

Sinclair Hood’s attempt to spread the available later material from *Emporio* on Chios across the whole EB III, MBA and LBA, (Hood 1981; 1982) can now be revised following a re-evaluation of the published material and its provenance.<sup>6</sup> The evidence for occupation of the site gets very thin after Hood’s Period I (ca. Troy IIg/III). The site becomes re-occupied towards the end of the MBA or the beginning of the LBA. Better (deeper) deposits are preserved in Area F and belong to what already Hood had considered to be a ‘Pre-Mycenaean’ category, but are now more firmly datable to the Early LBA (Fig. 2.4). The best evidence in Area F comes from trenches B and F, where LH IIIA and IIIB are not represented, and the early LBA is followed directly by LH IIIC levels. The material culture of this Early LBA phase includes some of the grey wares (Hood 1982, 571–573, fig. 255, Pl. 11), most of the matt-painted wares (Hood 1982, 573–538, figs. 256–257, Pls. 114–116), as well as several Aegean/Minoan shapes (Hood 1982, 599–600, fig. 269, Pl. 123). While loom-weights, stone vessels, clay lamps and moulds hint at similarities with Koukonisi and Samothrace,<sup>7</sup> the pottery shows rather an interesting mix of island cultures with Anatolian elements (*e.g.*, the carinated bowls), visible also on Lesbos, but not so much on Lemnos and Samothrace. Conical cups and semiglobular cups hint at southern Aegean connections. The

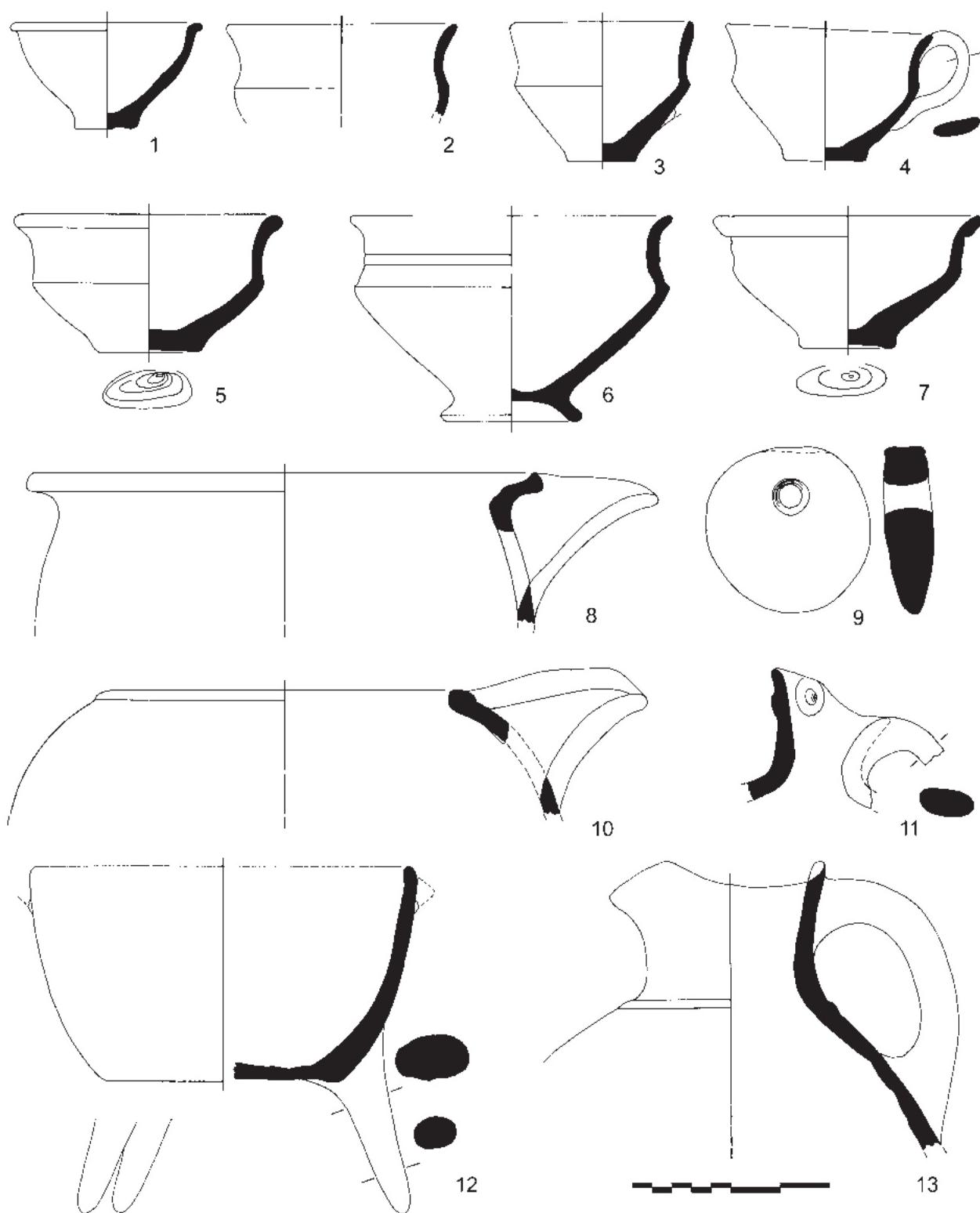


Fig. 2.3: Thermi on Lesbos. Selection of Hybrid Shapes from early LBA contexts, Scale 1:3 (courtesy of the British School at Athens, drawings P. Pavúk).

local matt-painted bichrome ware (represented mostly by jugs) can be considered an interesting case of hybridisation, for it does not resemble that of the Middle Helladic period from Greece (Hood 1982, 573–578, figs. 256–257, Pls. 114–116), but it seems to mix Cycladic elements, *e.g.* the Black-and-Red style pottery from Phylakopi (Atkinson *et al.* 1904, Pl. xxiii), together with the dark-on-light production in Crete starting from MM IIIB. The majority of the Area F ‘Pre-Mycenaean’ finds dates likely to the LM I or even LM II periods.

With Chios facing the Urla peninsula we have reached the southern edge of the Upper Interface. The Minoanising aspects from Çeşme-Bağlararası concentrate mostly in Phase 1 (ÇB 1), contemporary with LM IA in Crete (see Şahoğlu 2015 for the most recent summary). Proper imports from Crete are not so numerous and are represented generally by dark-on-light fine wares (Şahoğlu 2007, 317–328, figs. 10; Erkanal and Keskin 2009, 103, fig. 10.). The rest of the imports should rather be termed ‘Minoanising,’ such as the light-on-dark jug-handles belonging possibly to the East-Aegean LOD/DOL Wares (Şahoğlu 2007, 317–328, fig. 11. Cf. Davis 1982; Vitale 2006; Momigliano 2007), or various semiglobular cups with dark-on-light (bichrome) running spirals that betray the same Cycladic spirit already observed at Emporio (Şahoğlu 2007, fig. 12; Erkanal and Keskin 2009, 103, figs. 11–12). Some may in fact be actual imports from Emporio (see especially Erkanal and Keskin 2009, 103, fig. 11). The architectural layout of Çeşme-Bağlararası in this phase is unclear because of surface proximity leading to poor preservation, but the majority of local pottery seems to be in the standard West Anatolian wares, including also Anatolian Grey Ware. As for the shapes, not much has been published, but S-shaped cups seem to be quite popular with deep lower body and very good parallels from Koukonisi, but also from Kos (Şahoğlu 2007, 317, fig. 9; Boulotis 2009, fig. 9: h; Morricone 1967, 37, fig. 10: Inv. no. 315 [Eleona, Tomb 4]. The latter seems to be later but nevertheless constitutes an interesting link). These are certainly not Anatolian, and would fit well into the hybrid category.

### Interpreting Minoanisation in the Northeastern Aegean

The existing literature often portrays the exiguous evidence from the NE Aegean as representative of the region’s lesser integration into the social and economic system of the southern Aegean (Mountjoy 1998, 33–34). Rather than accept such an interpretation, which pushes the NE Aegean into a peripheral position and may even condition one to think in terms of out-dated dichotomies (*e.g.*, subject-ruler), we argue that the data show a far more dynamically interactive relationship. It seems clear that contacts with Crete only began in the mature phase of the Protopalatial period on

Crete. Such contact became almost widespread across the region at the end of the MBA, roughly corresponding to MM III and LM IA in Crete. One can also observe that during this period aspects of Cretan material culture were more deeply incorporated into the local culture and eventually led to new creations – those that we call *hybrid*. This might reflect independent sailing flows from Crete to a given desired location, but the observed differences can also represent different degrees of receptiveness among the islands (Fig. 2.5).

The evidence from Mikro Vouni is the most striking because of the appearance of pottery imports along with administrative documents.<sup>8</sup> This fact, so far unique, betrays a special interest by Crete for Mikro Vouni and/or the island of Samothrace as a whole, and the desire for control over sources of raw materials on the island or, more likely, on the north Aegean mainland. Interestingly, at Koukonisi (Period IV) at about the same time, a few imports from Crete aside, the majority of imported wares come from other areas of the southern Aegean. Therefore, it is tempting to visualize two different trade interests: during the mature stage of the MBA, the ‘Minoans’ opted to focus more attention on Samothrace, and Lemnos appears to be of less direct interest. Another explanation could be that Lemnos, having seen ‘Minoans’ already on Samothrace, tried to explore their own means of communication and business, thus inviting a degree of Minoanisation.

This issue brings us to a further aspect of the analysis which investigates other types of material culture evidence. We acknowledge that we do not have evidence for the adoption of Minoan architectural styles and frescoes, nor of funerary customs, rituals and religious symbols. The establishment of mansions arranged and decorated in Minoan style, or even the adoption of selected elements of Minoan architecture (ashlar masonry, pier-and-door partitions, Γ- or T-shaped doorjamb bases, stylobates, drainage systems, lustral basins, ‘Minoan Halls’, pillar halls and stoas) is basically absent.

The evidence for weaving activity and cooking habits is less ambiguous. The evidence for the former is quite strong on Samothrace, Koukonisi, and Emporio, represented in all cases by the diffusion of the discoid type loom-weight, often with the typical ‘Minoan’ groove on top (see Cutler this volume). However, keeping in mind the simultaneous existence of several other loom-weight shapes in Crete during this period (Carter-Smith 1975; Anderson Strand and Cutler 2011), it is increasingly clear that the evidence does not exactly represent the spread of a technology as such, but rather the desire to produce only a certain type of fine textile facilitated by this type of loom-weight.

The Minoan type of tripod cooking pots are actually not well documented. To date, apart from one specimen from Thermi, the strongest evidence comes from Koukonisi and Mikro Vouni, but even this is not without difficulties, since

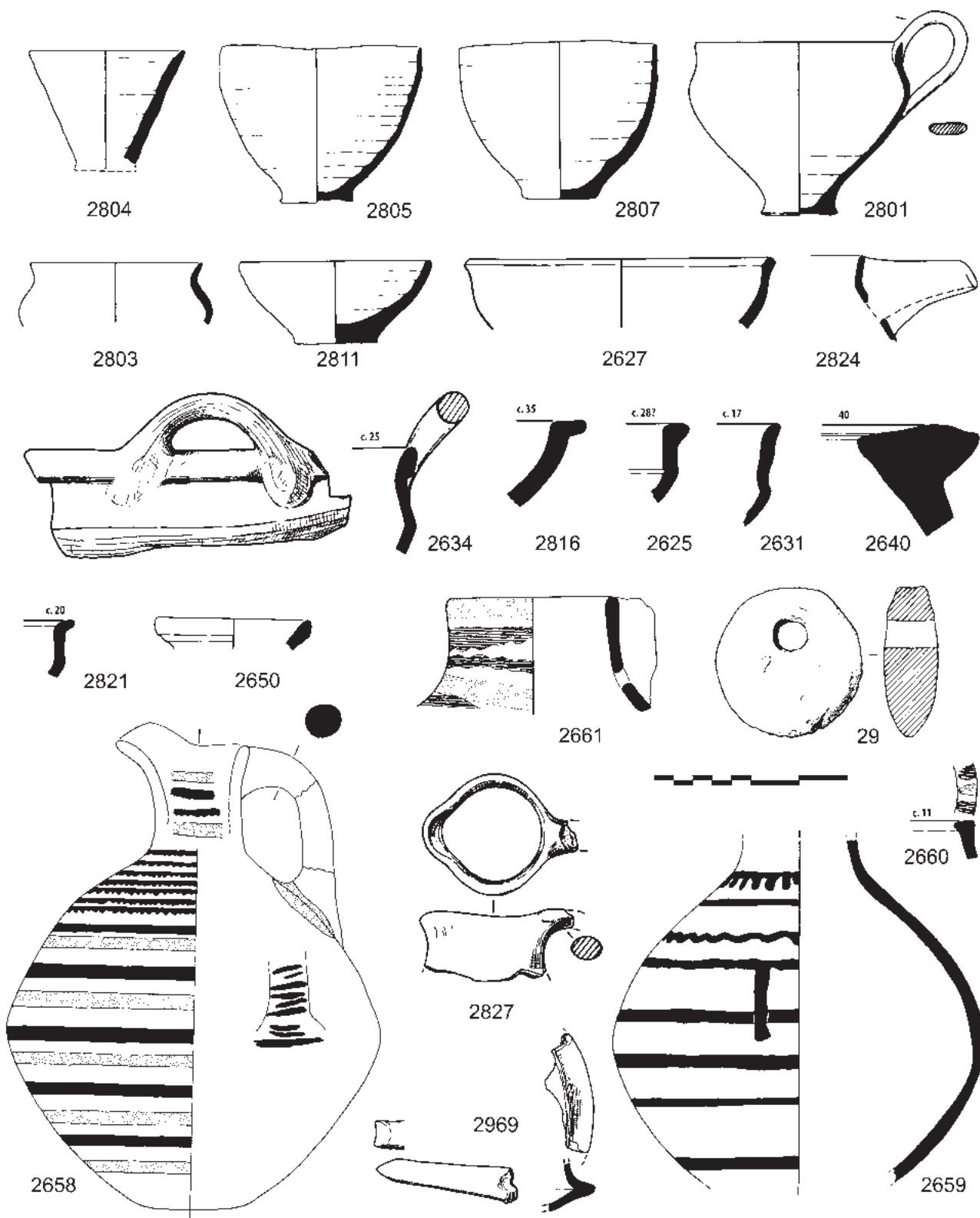


Fig. 2.4: Emporio on Chios. Representative selection of early LBA ceramic finds, Scale 1:3 (courtesy of the British School at Athens, adjusted after Hood 1981).

tripod cooking pots had existed in the area since the EBA. However, at Mikro Vouni, we have possibly observed a relevant detail in attributing the tripod cooking pots to different traditions: whereas the flat oval variety continues from the EBA, the rounded ones with pointed ends seem to be of a southern influence. At the same time, local cooking pots were well represented throughout, and were even found together with vessels betraying possible Balkan influence, as shown by the so-called *pyraunoi*. In addition, the introduction of Minoan type cooking pots was coupled with an increased range of ‘local’ cooking pot shapes. Recent archaeozoological studies have shown that, while there is not so much change between the pre-contact and contact stages, it is the hybrid stage that sets itself apart.<sup>9</sup>

A striking shift between the pre-contact and contact stages is not detectable in the manufacture (technology) of pottery, since at Mikro Vouni the use of the potter’s wheel started already at the beginning of the MBA. The appearance of the first Minoan imported wares (mostly fine ware and egg-shell Kamares ware belonging to open and serving shapes) did not affect directly the local production: imported Minoan shapes were not directly imitated in local wares, there is no imitation of any monochrome or light-on-dark pottery style. What is interesting instead is the fact that the appearance of Minoan imports accelerated the use of wheel-made pottery in local production and enlarged the corpus of serving, cooking and storage vessels. At the same time, pottery in clearly Minoanising shapes included only specific functional categories (cooking and domestic shapes) and not tableware. In the post-contact stage, Minoan imports decreased steadily, but the detected hybrid shapes betray a set of choices that must have regulated relationships between potters and consumers.

Samothrace, therefore, is an interesting case that shows how the intensification of the potter’s wheel, together with Minoan influence, did not let the ‘standard’ Minoan drinking shapes evolve (Wiener 1984). As already noted above, conical cups are almost absent from Mikro Vouni, though well represented at Koukonisi, and the dominant drinking shape is the hybridized semiglobular cup that must reflect a deliberate local choice in drinking habits, which in turn is not attested on Lemnos (at least not to such an extent). Although the archaeological evidence as such cannot allow broad patterns, the pottery production provides clear clues to cultural preferences and social strategies.

### The Dynamics of Mycenaeanisation in the Northeastern Aegean

Mycenaean influence and pottery in the NE Aegean and NW Anatolia – similarly to other parts of the Aegean outside the core area of Mycenaean ‘culture’ – is much stronger and more widespread during LH IIIA–B than in the preceding

and succeeding phases (Benzi 2002; Bryce 1989; French 1978; Gates 1995; Kelder 2006; Mee 1978; 1998; Mellink 1983; Niemeier 1998; Özgünel 1996). However, a brief comment on the LH I and II periods is needed, embracing also the Chalkidiki peninsula, which complements the picture in these periods.

### LH I–II

The LH I and II evidence is currently limited to only a few sites. Early contacts in LH I have been attested so far only on Chalkidiki, at *Torone* phase V, represented by 4 fragments of imported decorated Vapheio cups (Cambitoglou and Papadopoulos 1993; Morris 2009–2010, 53, 57, fig. 45). The preserved context does not allow for any specificity of which type of local pottery went with the imports; presumably the same as with the LH II imports, both mirroring likely finds from the contemporary Hagios Mamas (Horejs 2007).

The main evidence for LH II comes from *Troy* (phase VIId–f), where the amount of sherds steadily increases from LH IIA (15 fragments) to LH IIB (50 – all excavations counted).<sup>10</sup> Shapes mostly belong to serving vessels (cups, Vapheio cups, goblets, askoi), though squat jugs and piriform jars do occur. A distinctive group of five tall storage stirrup jars (*Troy* VIIf) with clear Minoan features is datable to LM II–IIIA1 (Blegen *et al.* 1953, figs. 330, 408.4, 7–8, 10–11; Mountjoy 1997, 283–285, fig. 6). The macroscopic analysis of clay and surface treatment, as well as the decorative motifs (Popham *et al.* 1984, Pls. 51a, 52f, 61d–e, 73 a–b, d, 74 b–c), suggests that the vases may be imported from central-north or eastern Crete. Neutron Activation Analysis for LH IIA and IIB (Mountjoy and Mommsen 2006, 99, 120) has shown the presence of imports from the Argolid (originally considered to have been produced at Troy), Thessaly, and Aegina. The analysis has, however, also shown that Mycenaean pottery was imitated locally (NAA Group D-Troy) already at this early stage (Mountjoy and Mommsen 2006, 120). The local unpainted pottery consists mainly of Anatolian Grey Ware and Tan Ware, generally speaking in West Anatolian shapes, not yet imitating Aegean shapes (Pavúk 2002; 2005; 2014).

LH IIB at *Poliochni* on Lemnos seems to be limited to 2 sherds, both considered to be imported from the Greek mainland (Cultraro 2005, 239, Pls. LXIb, LXIIa). Meaningful, though not stratified, is the occurrence of matt-painted pottery (Cultraro 2005, 240, Pl. LXIIIa) dating to the early LBA. Mentioning non-Mycenaean ceramic imports, some of the painted fragments at Hagios Mamas in Chalkidiki also deserve attention (Horejs 2007, 289–294, Pls. 29: 10380; 53: 10377–10379; Pl. 149 bottom), as do the relatively numerous fragments (ca. 80 from all excavations) of matt-painted pottery of unknown origin at Troy in strata of *Troy* VIId–f (Blegen *et al.* 1953, fig. 382; Pavúk 2014). In terms of small finds, a conical dagger pommel made of

Argolis	Hagios Mamas	Torone	Troy	Mikro Vouni	Poliochni	Koukonisi	Emporio	Liman Tepe	Miletus	Crete		
LH IIIB	3 4	VI (LBA) unstrat.	VIIa	?	?	Cist Grave Area D, pre-Stage I (Tr. Q, 9-7)	II: 2 II: 3 Disturbed III: 1 - 2 III: 3 III: 4 IV: 1 IV: 2 V: 1	VI	LM IIIB			
LH IIIA	5		VIIg-h					?	?	?	V	LM IIIA
LH IIB			Vle-f					Eroded	Violet	?		LM II
LH IIA			Vld					I	III	Area F, Stage 6 (Tr. B and F)	IVB	LM IB
LH I	8		Vlb/c					II - III				LM IA
MH III	9 13		Vla					IV - V	Brown		IVA	MM III
MH II	14		V					VI - VII	IV	Hiatus? MBA?		MM II
MH I	17		IV					VIII	Hiatus?			MM I
EH III	18		IIg - III					IX	Yellow	V	IV: 2	EM III
EH IIB	?									Period I	V: 1	EM IIB

Fig. 2.5: Comparative chronology for the crucial sites mentioned in the text.

white marble from *Kato Phana* on Chios is likely datable to LH II (Hood 1981, 6, fig. 3.12, Pl. 3g).

The first stage of the cist tomb cemetery at *Archontiki* on the small island of Psara is also worth noting. Whereas the majority of the offerings belong to the LH IIIA–B period, earlier Mycenaean pottery includes a LH IIB straight-sided alabastron (Achilara 1996; Mountjoy 1999b, 1156) (see *infra*). Whether local pottery of non-Mycenaean type was also among the grave offerings is not known.

### LH IIIA

The LH IIIA period is again best represented at *Troy* (Korfmann ed. 2006). LH IIIA1 material corresponds to Blegen's architectural phase VIg (Mountjoy 1997). Even though the material from both old (Mountjoy 1997; 2008) and new excavations (Mountjoy and Mommsen 2006) is even less plentiful (ca. 30 fragments) than in the LH IIB phase, the range of shapes now includes a wider variety of serving (cups, goblets, kylikes) as well as transport vessels (piriform jars, stirrup jars, alabastra, and small handleless jars) types. Neutron activation analysis shows again a preference for the Argolid, but with some new input from Kos and Miletus (Mountjoy and Mommsen 2006, 99, 120). LH IIIA2 (phase VIIh) is the best represented period at Troy (Mountjoy 1999a), with the ratio of decorated Mycenaean pottery reaching ca. 3% of all the pottery (but bear in mind that, pending the final publication of all material, this number is still only an educated guess). The number of shapes definitely increases and includes now a large variety of open

and closed vessels (kylikes, mugs, spouted bowls, stemmed bowls, cups, kraters, amphoroid kraters, piriform jars, stirrup jars, feeding bottles, alabastra, rhyta, cutaway-necked jugs). Most of the Mycenaean pottery belongs still to Myc/Berb chemical profile (A-Troy), with just a few identified imports from Boeotia or Central Greece (4 sherds) (Mountjoy and Mommsen 2006, 99, 120). Finally, Mycenaean pottery was also found in the cemetery of cinerary urns located at the edge of the Lower City (Blegen *et al.* 1953, 370–390; Mountjoy 1999a, 284–288). The local pottery in all these cases continues to be dominated by Anatolian Grey Ware and Tan Ware, with Westanatolian shapes still setting the picture. But the potters also start imitating Mycenaean shapes. Most popular were semiglobular cups, goblets and kylikes, less so shallow angular bowls, piriform jars and stirrup jars (the biconical type). The ratio of such Mycenaean shapes was a little overestimated by Blegen, and lies in reality around 10%, but the exact numbers are not yet calculated (Blegen *et al.* 1953; Pavúk 2005, 273, Pl. LXVI top).

The LH IIIA period on Lemnos is still on shaky ground, but recent pieces of evidence deserve particular attention. At *Poliochni* only two LH IIIA imports have been identified (Cultraro 2005, 239–240, Pls. LXIIC:1–2, LXIIC:3). However, what kind of local pottery went with them is only a guessing game. The already mentioned hole-mouthed jar (Bernabò Brea 1976, 337, fig. 178; Cultraro 2005, 240, Pl. LXIIC:2) could be typologically either later Troy VI-Middle or VI-Late, that is LH IIB and IIIA; some of the published conical cups (Bernabò Brea 1976, Pl. CCLXXXII g–l; Mendoni 1997, 152–153, fig. 3a–b) could also be LH

III A, but not later.<sup>11</sup> Fragments of carinated brown and grey craters, as well as a beige kylix-like stem could also belong to this phase (Bernabò Brea 1976, Pls. CCLXXXII: a, CCLXXXIV: g–i; Cultraro 2007, fig. 3:13). This could indicate that, similarly to the evidence from Thermi and Antissa on Lesbos, Poliochni at this period could have developed a new pottery phase, reflecting both Mycenaean and Anatolian shapes in local wares, with some imports of Mycenaean decorated pottery.

The existence of a LBA at *Myrina* has also recently been suggested, but the evidence includes only a few sherds dating to LH IIIA2 (Cultraro 2005, 242).

New and vital information comes, however, from the excavations at *Hephaestia* carried out by the Italian Archaeological School at Athens (Privitera 2005; Coluccia 2012; 2015). Whereas previously we only had sporadic finds, such as a Mycenaean seal or pottery fragments (Mustilli 1942, 78–80, figs. 126–127; Pini 1993, 37–38, n. 34; Messineo 2001, 117–118, n. 87, fig. 102), the new excavations proved the existence of several architectural phases, embracing the LH IIIA2, IIIB, and IIIC periods, with walls and at least two superimposed pavements with stratified pottery in between and on the upper level (Privitera 2005; Coluccia 2012). Regarding the LH IIIA2 phase, two important tendencies have been pointed out (Coluccia 2012): firstly, the pottery shows a wide variety of fabrics; secondly, the articulation of functional shapes shows a dominance of serving vessels (kylikes, cups and craters), followed by kitchen vessels, and a small percentage of storage vessels (Coluccia 2015, fig. 4a–b).

Lesbos has been called the “grey area” of Aegean archaeology (Spencer 1995a; 1995b), a name which well describes our present knowledge of the island. It has been claimed recently that on Lesbos the evidence for the 14th century is scarce and that the amount of Mycenaean pottery rises substantially only in LH IIIB (Guzowska and Yasur Landau 2003, 474). However, from what has been published, our impression is that the majority of uncovered Mycenaean pottery dates rather to LH IIIA2, with LH IIIB represented as well. As pointed out before, the evidence from Thermi seems to indicate the existence of a hybrid stage at the beginning of LBA. By LH IIIA the situation changes and one can notice imitations of Mycenaean shapes in local wares, as well as non-Mycenaean shapes, which are either Anatolian or a local development. Judged from the Trojan perspective, the *acme* of the Mycenaean imitation in monochrome local ware is LH IIIA. This picture is well supported at Thermi and Antissa.

At *Thermi*, North of Mytilene on the East coast, the 2nd millennium, unlike the levels of EBA, has mostly been eroded and Miss Lamb was able to excavate only sections which remained preserved on the southern slopes of the tell. The main trenches are II and T; whereas II preserved the first half of the 2nd millennium, trench T offers a unique time capsule: a completely excavated burnt house with *in situ*

pottery, including Mycenaean sherds (Fig. 2.6). This house contained 3 semiglobular cups and 1 large goblet resembling Mycenaean shapes, 2 plates/shallow bowls and 1 large jar of a non-Mycenaean type. Other metal artefacts were also documented: a copper needle, a bronze or copper needle, a bronze or copper drill, a bronze or copper arrowhead, 1 copper knife, and a bronze sword (Lamb 1936, 204–207). Mountjoy dated the handful of Mycenaean imported pottery to LH IIIA1/A2 Early (1999b, 1156).

At *Antissa* on the NW coast, the LBA levels – including Mycenaean pottery – were encountered in trenches A, P and C on the isthmus, but also higher up the hill towards the acropolis in trenches I and O. Koldewey describes a “very early” wall on the eastern side of the Kastro, which Lamb had tested, but could not prove or disprove its LBA origin (Lamb 1930–1931, 166; Koldewey 1890, 19, Pls. 6–7). The LBA pottery shows strong similarities with that from Thermi, likewise imitating Mycenaean shapes in local wares (Lamb 1930–1931, Pl. 28.2). MBA and early LBA was either not reached, or is not represented at Antissa.

On Chios, the evidence from *Emporio* deserves special attention. Since the nature of depositional processes at the site makes it difficult to distinguish a meaningful stratigraphy, the LH IIIA and IIIB pottery will be treated together. Second millennium levels in Emporio were preserved on the western (Area D) and northern (Area F) slopes of the acropolis, situated on a medium sized, irregular outcrop dominating a harbour to the north and a pebble beach to the south. Later building activity, as well as the steepness of the slope, very likely led to much erosion and disturbance. The material was originally presented typologically by Hood, who attempted to highlight the LH IIIC settlement levels (Hood 1982, 579–622; 1986). However, a closer look at the published material by deposit revealed that it is possible to identify more or less undisturbed deposits belonging in fact to preceding settlement phases also (see *supra*). The situation in Area F shows a ‘Pre-Mycenaean’ phase, which can now be dated to Early LBA, followed by a gap, represented by LH IIIA and IIIB periods, and a reoccupation during LH IIIC. Ever since Desborough (1964, 158–163), it has been known that there is some LH IIIA and IIIB pottery stemming from the Emporio excavations, recognized also by Hood, but all of this was considered to be just washed down from higher up the slopes of the Acropolis. In Area D the sequence is slightly different. The Early LBA is barely preserved and the deeper strata in trench Q seem to belong to LH IIIA/B (strata 9–7); the following strata 4–5 seem already to represent the LH IIIC settlement. Finally, the only proper evidence for LH IIIB was the cist grave located west of Area D.

Thus, a closer look at the published pottery now makes it possible to identify LH IIIA and IIIB levels, indicating a proper occupation of the site during this period. The pottery assemblage is represented by several kylikes, a flask, and

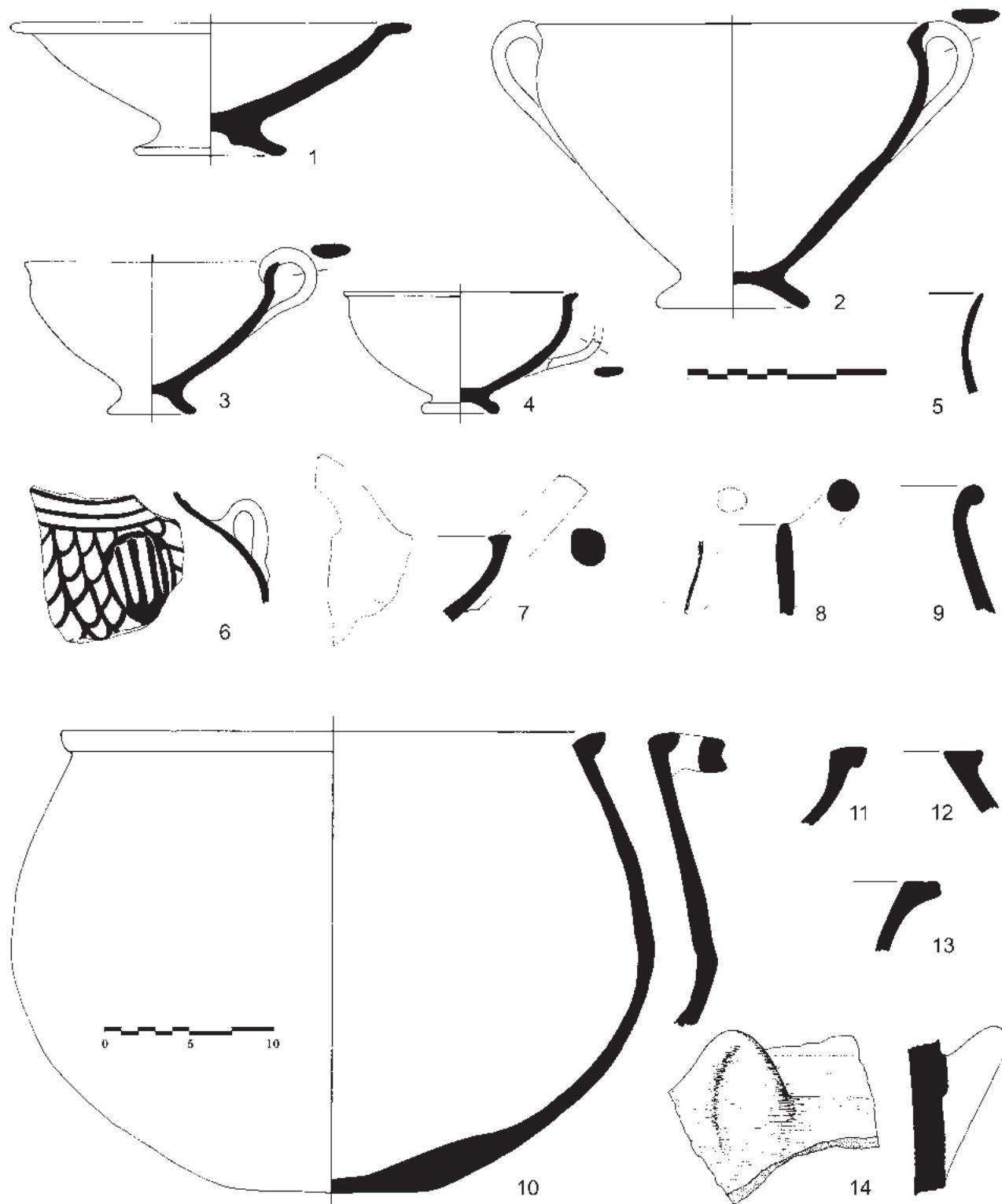


Fig. 2.6: Thermi on Lesbos, House T. Floor deposit and associated pottery from a LH IIIA2 (early?) destruction, Scale 1:3 (courtesy of the British School at Athens, drawings P. Pavúk [1–4, 10], the Thermi Excavation Records [5, 7–9, 11–13], after Lamb 1936 [6, 14]).

a few deeper rounded bowls with horizontal handles, a jug with round mouth and a ridge along the neck. Fenestrated stands in Gray Ware (likely imported) belong to this deposit (Hood 1981, 573, fig. 255: 2654).

While it has previously been pointed out that the local material culture in 13th century Emporio has strong Anatolian characteristics (Guzowska and Yasur Landau 2003, 472), our impression is that the character of local pottery, rather than being Anatolian, builds upon the hybrid forms stemming mainly from the earlier process of Minoanisation. Interestingly, whereas there are Non-Mycenaean shapes in deposits related with LH IIIA/B pottery, the following IIIC pottery seems to be *entirely* ‘Mycenaean’. What is not completely clear from Hood’s description is the question of what was imported and what is locally made (in terms of pottery). Almost certainly, the majority of the LH IIIC pottery is locally made and the fabric resembles roughly that of the Early LBA Matt-Painted ware, which can also be considered local (Pavúk *vidit*). To what extent the LH IIIA/B pottery had also been produced locally is unclear, but Hood does not state that they could be imported, whereas he does state this with other pieces of LH IIIC.<sup>12</sup>

### LH IIIB

At *Troy*, the destruction at the end of phase VIh did not cause major changes in pottery production: there is a great deal of continuity between VIh and VIIa phases, but the number of shapes narrows down quite drastically. The Mycenaean decorated pottery dates now to LH IIIB. Mountjoy (1999c, 301) has noticed the introduction of a new fabric group (*i.e.*, Ginger Ware), which is the local imitation of Mycenaean pottery (mainly deep bowls and kylikes) using the Tan Ware and a matt paint applied on a burnished surface for the decoration. Chemically it is mostly part of the B-Troy group (Mountjoy and Mommsen 2006, 120). Imports, though not numerous, include sherds from the Argolid and Boeotia; the repertoire of both imported and local Mycenaean wares follows the general LH IIIB characteristic in the Aegean (Mountjoy 1999c, 301), complemented however by Anatolian shapes produced with Mycenaean decoration (tall stand, hemispherical bowl, carinated krater).

A crucial site on Imbros must have been *Yeni Bademliköy* (Aghios Floros), originally an EBA tell controlling a deep valley in the opposite NE part of the island. The second millennium levels are almost completely eroded away (Andreou and Andreou 1991; 2001; 2002; Harmankaya and Erdoðu 2003, 463; Hüryilmaz 2009), but a Late Mycenaean deposit has been excavated on the highest (preserved) point of the tell in square F10 (Hüryilmaz 2000, 249; 2002, 89, fig. 15; Guzowska and Yasur Landau 2003, 474–475). Only Mycenaean decorated sherds of unclear IIIB to IIIC date with distinct diluted paint were reported, laying directly on an EBA ramp.<sup>13</sup>

On Lemnos the evidence comes from at least two sites. At *Koukonisi*, the Mycenaean period is represented so far only by surface evidence on the upper part of the low hill, with scattered pottery and clay figurines (Phi- and Psi-shaped idols have been found) (Boulotis 1997, 275, fig. 28). At *Hephaestia*, excavations in 1993 brought to light a group of LH IIIB vessels, probably belonging to a floor deposit: 1 scuttle, 2 deep bowls, 3 kylikes, and 1 jug (Messineo 1997, 241–252; 2001, 112–118, figs. 89–94; Privitera 2005, 230, Pls. LIXe–f, LXe–f). Further excavation carried out in 2003 has shown the existence of LH IIIB structures (likely mansions) laying directly on the previous LH IIIA2 occupation layer (Coluccia 2012).

The picture of Lesbos in this period is not promising. Although Mycenaean pottery is attested at a few sites (Spencer 1995a; 1995b; Guzowska and Yasur Landau 2003, 474), it is hard to form an idea of settlement organisation or to evaluate the process of Mycenaeanisation. The evidence of *Perama*, consisting of surface finds only, is unclear and Bayne (2000, 104, 109) claimed it to be mostly LH IIIB. This is possible but again we are not able to verify it and the illustrated sherds are not helpful. Further LH IIIB sherds are reported from *Mytilene*, *Pyrrha* and *Methymna* (Guzowska and Yasur Landau 2003, 474), but their numbers are low, the local context unclear, and identification would need to be verified.

### The Funerary Evidence

Discussion of the limited data by previous researchers (French 1978; Mee 1998, 140; Müller Celka 2005) centred around several points, two of which we consider to be especially relevant: firstly, it is hard to grasp any clear relationship between the diffusion of Mycenaean pottery and the historical events argued from the Hittite texts (Kelder 2006, 78–79). Secondly, it has been suggested, especially for the Upper Interface (as defined in Mountjoy 1998), that we likely face groups of communities which shared a common vision of the afterlife, and were socially organized under the authority of a few people who expressed their internal power by maintaining long-standing relationships with the Mycenaean world (Basedow 2002, 473).

A closer, even if brief, look at the funerary evidence could thus enlighten possible patterns of migration/interaction between groups, especially when considering the great divide between the Upper and Lower Interface, with the latter showing stronger traits of Mycenaeanisation (Benzi 2002, 372–381; Mountjoy 1998).

In the Troad, the *Beşik Tepe* cemetery, located at a supposed harbour of Troy (Basedow 2000), contains four types of graves (pitchoi, pots, cists, and two stone-built tombs) totalling 102 graves dated between LH IIIA2 early and LH IIIB1. The pottery is represented by 131 pots (pitchoi excluded)

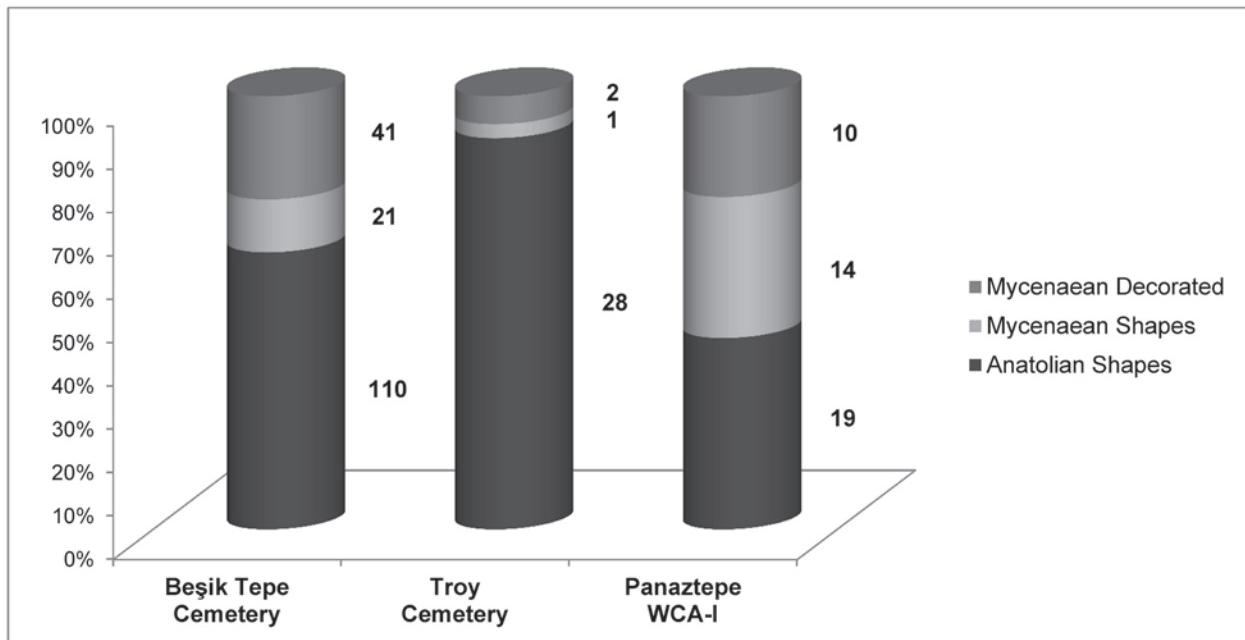


Fig. 2.7: Beşik Tepe, Troy and Panaztepe Cemeteries: Incidence of Mycenaean decorated pottery, charted against Anatolian and Mycenaean shapes in local wares (based on Basedow 2000; Blegen et al. 1953; Mountjoy 1999a; Günel 1999).

and diagnostic fragments in local unpainted wares (110 in Anatolian shapes and 21 in Mycenaean shapes), as opposed to 41 Mycenaean decorated vessels (likely imports) (Fig. 2.7).

At Troy itself, a heavily disturbed cemetery was first located by Dörpfeld and later excavated by Blegen and his team (Blegen et al. 1953, 370–391; Becks 2002, 296–299). Unlike at Beşik Tepe, there is only a single pot in Mycenaean decorated ware (a small stirrup jar), one in Mycenaean unpainted ware, and a possible Mycenaean shape in local ware, balanced by 28 Anatolian shapes in local wares (Fig. 2.7). There are some further 20 fragments of Mycenaean decorated Ware and even one complete alabastron, but they have no exact findspot (Mountjoy 1999a, 284–289).

The only evidence from Lesbos comes from the site of *Makara* where several tombs were found, likely of the built chamber type, although robbed (Charitonidis 1961–62; Spencer 1995a, 275).

Further down the Anatolian coast, two cemeteries at *Panaztepe* provide truly rich evidence: the Northern Cemetery Area (called also Cemetery II), and the better known Western Cemetery Area (or Cemetery I) (Ersoy 1988; Erkanal 2008; Günel 1999, 171). Two phases of the Western cemetery can be distinguished. Phase I ('Tholos Phase') is represented mainly by 'miniature' corbelled tholos tombs, with a short *dromos*, and some cist tombs, all dating to LH IIIA and IIIB periods (Erkanal 2004, 656–657; 2008). Phase II ('Pithos Phase') is represented principally by pithoi, pot-graves and cists, all dated by the excavator to the 12th–11th centuries BC, implying a LH IIIC date (Erkanal 2008, 77).

Judging from the various pieces of information available so far, it seems that not all graves were equally richly equipped. By far the most common category of grave goods is ceramics. Taking the northern plot of the Western cemetery published by Günel (1999) as *pars pro toto*, there are 19 pots in local unpainted wares in Anatolian shapes, 14 Mycenaean shapes in local wares, and 10 Mycenaean decorated pots, likely imported. Mycenaean decorated pottery occurs exclusively in the tholos and some of pithos graves, and is datable between LH IIIA1 and LH IIIC Early (Fig. 2.7).

A rectangular chamber tomb was uncovered on top of the mound of the Late Chalcolithic and EBA settlement of *Baklatepe*, just a few centimetres below the surface (Erkanal and Özkan 1999, 110–112, figs. 9–14). The grave offerings consisted of 26 local and imported vessels. Mycenaean decorated vessels, likely of local production and LH IIIB and IIIC in date, include a stemmed bowl, a kylix, alabastron, three stands and two atypical bowls making up ca. 30 % of the ceramic offerings. The remaining local unpainted pottery is represented by plates serving as lids, large pilgrim-flasks, carinated bowls, jars and two large kraters, mostly in local buff and reddish wares.

Another important, even if singular, find is the tholos tomb at *Colophon*, excavated by H. Goldman and C. Blegen in 1922, just 6 km south of Baklatepe. The fill contained fallen stones mixed with many fragments of early pottery and bones including a boar's tusk (Bridges 1974). The finds are now lost, but were said to be of LH IIIB or IIIC date.

At *Emporio* on Chios one cist grave, found along with a second one robbed, was located in Area E, west of the Acropolis (Hood 1981, 152–153, fig. 83; 1982, 582–583, fig. 260). The Mycenaean decorated pottery found inside is datable to LH IIIB. The three vessels consist of a straight-sided alabastron decorated with standard foliate band, a mug decorated with not completely canonical vertical bars, and a broad shallow one-handled bowl, monochrome outside and with linear decoration inside. The fourth vessel was a plain handleless conical cup in a local buff fabric (Hood 1982, 583, fig. 260: 2707).

Northwest of Chios is the small island of Psara, where the local Ephoria discovered a cemetery of almost 100 tombs at *Archontiki* between the 1980s and 1990s. Cist graves represented the majority type, followed by a few built-chamber tombs (Charitonidis 1961–62; Achilara 1996; Papadimitriou 2001, 143–146), as well as two receptacles (likely ossuaries, but found empty!), 1 pithos grave and a tholos tomb (Papadopoulou *et al.* 1986; Archontidou 2006; Mulliez 2010, 155). The discovery of other tomb types and burial treatments reveals a similar mixed picture as the one shown at Panaztepe and Beşik Tepe. The rich grave offerings are composed of Mycenaean ware (LH II–IIIB1), Grey Ware, Red Ware, weapons (arrowheads, daggers, swords), seals, and jewels of gold, faience and semiprecious stones. Judging by the finds exhibited in the Archaeological Museum in Chios town, the local wares made up to 20–30% of all pottery. The shapes were not necessarily Anatolian, but also not clearly Mycenaean. Likewise, the red and grey wares are very distinctive, with a thick slip, unlike those in Western Anatolia. In terms of shapes (various carinated and ovoid cups, and spouted shallow bowls are especially distinctive), possibly also of wares, one should look rather to the unpainted non-Mycenaean shapes of the Dodecanese (Benzi 1996).

### Interpreting Mycenaeanisation in the Northern Aegean

The analytical summary above has pinpointed several problems. First of all, contacts with the Greek mainland had started already at the end of the MBA, more or less parallel with Southern Aegean influences, ceased somewhat in the Early Mycenaean period, but did not die completely, only to increase massively again in LH IIIA2, continuing into LH IIIB. Furthermore, there does not seem to be any central authority or hierarchy among the NE Aegean islands; nor is there such a strong link to the mainland coast as with that observable in the South. Interestingly, the exchange does not seem to be mutual: the NW Anatolian mainland is accepting goods (rich ceramic imports at Troy from the islands) but almost no (pottery-) imports from Anatolia are going the other way.

The evidence consists mostly of pottery, whereas other aspects of material culture (such as frescoes, sealings, balance weights, palatial architecture, religious practice, and cult objects) are again conspicuously absent (*cf.* the previous MBA evidence). Worth further study, however, are certainly seals, jewellery and other adornments, textile implements and metal objects. Drawing the results together, preliminary conclusions can be summarised for each category.

### Pottery

Whereas the ‘Mycenaeans’ seem to show a very early interest in the North, going back even to the MH III (Agios Mamas, Molivopyrgos, Torone), this interest does not develop later as strongly as it does in the East. By LH II, Troy comes into the picture, but the amounts and types of imported pottery seem still to be comparable with the North, as might be also any Mycenaean activity behind it. At the southern edge of the area here analysed, we get in this period the Psara cemetery and the first pieces of evidence in the Izmir region. The period of LH IIIA1 is not so clear, but seems to follow the Early Mycenaean scheme. During the LH II and LH IIIA1 periods the imported Mycenaean pottery comes from a wide range of sources, including Attica, Aegina, Boeotia, and the area of Dimini (as far as one can tell from the chemical analyses: Mommsen *et al.* 2001; Mountjoy and Mommsen 2006; Akurgal *et al.* 2002).

The picture changes considerably in LH IIIA2, when all of Western Anatolia witnesses a major rise in the amount of Mycenaean pottery, still mostly imported, but possibly also already locally produced. This is also a period when Mycenaean shapes, especially the small open ones (semiglobular cup, goblet and kylix), start being imitated in the local Island and West Anatolian unpainted, mostly burnished wares. As far as the imported Mycenaean pottery is concerned, it comes almost exclusively from the Argolid during this period and the following one.

By LH IIIB the Mycenaean pottery becomes even more clearly locally produced, the local production presenting its own peculiarities, such as the decoration with wavy lines, but also the use of Anatolian shapes for pots with Mycenaean decoration, as well as matt paint on burnished surfaces (Mountjoy 1998). Production of Mycenaean shapes in local wares continues, but, whereas it has a tendency to narrow down at Troy, the range of unpainted shapes is rather broader in Hethaestia. It seems, however, that the Mycenaean shapes and decoration complement the existing drinking set without replacing it.

### Textiles

As we have stressed above, the absence of administrative documents (a phenomenon that has been observed also in other parts of the Aegean) and other aspects, such as weaving

activity, is remarkable, again with the sole exception of Troy. There seems to be no doubt by now that these two aspects were strictly connected with the character of the Mycenaean palatial system in the Peloponnese, where it is proved that administration and specific segments of production, such as the textile industry, were controlled by the palatial elites (Killen 2008; Shelmerdine 2008, 141–144).

Under this light, the case of Troy is potentially noteworthy. Here, weaving activity is documented by flat discoid, flat trapezoid, and also by pyramidal loom-weights from LH IIIA2 and IIIB contexts (Becks and Guzowska 2004; Guzowska, Becks and Anderson Strand 2012; Guzowska *et al.* in press; Pavúk 2012). Whereas there are over 530 pieces of spindle-whorls from Troy VI and VIIa, there are actually not many loom-weights; the three types are represented by 84 pieces only. Likewise, whereas the spindle-whorls are spread more or less evenly over time, with a peak in Late Troy VI (LH IIIA2), the loom-weights occur for the first time in noticeable numbers only during this peak, and further increase during the following Troy VIIa (LH IIIB). Some of this is maybe just a matter of ‘bad luck’, since a large part of the citadel was erased already in antiquity. Nevertheless, it is perhaps no coincidence that both loom-weights and spindle-whorls do cluster on the preserved lower terraces of the citadel and in its immediate vicinity outside the citadel wall. Interestingly, another higher occurrence of spindle-whorls is in the fill of the ditch running around the Lower Town (systematically, in several trenches along its circumference), but that is likely more related with taphonomic processes, rather than actual spinning along the ditch.

One could thus assume some kind of central control over the textile production at Troy during LH IIIA2 and IIIB. Jill Carington-Smith had already suggested that the discoid and trapezoid loom-weights at Troy should be related to those on the contemporary Greek mainland (Carington-Smith 1992, 689–690), but to link them directly to ‘Mycenaeans’ only would perhaps be taking things too far. It would be good to know more about the earlier use of the vertical loom at Troy, but the evidence for Early and Middle Troy VI (MH III–LH IIIB) is meagre, and the existence of small pierced spools seems rather to indicate the use of the horizontal loom (Pavúk 2012).

### **Seals and Jewellery**

Two further categories are of potential interest: seals and jewellery. There is an increase of evidence in the Late Troy VI and VIIa (LH IIIA and IIIB) phases for jewellery, the majority of which seems to have parallels in mainland Greece, rather than in inland Anatolia (Pieniążek 2012). The category is composed mainly of beads, hairpins, and appliqués. There are no exotica, such as lapis lazuli, but the amber, on the contrary, is said to be typical of the Northern Aegean. Finally, seals constitute an interesting entity along

the East Aegean-West Anatolian Interface on their own. Those with secure contexts from Upper and Central Interface come almost exclusively from graves: 5 pieces from Beşik Tepe (CMS V Suppl. 1B nos. 474–478), 11 from Panaztepe (CMS V Suppl. 3 nos. 461–470), one from Baklatepe (CMS V Suppl. 3 no. 456). Two further seals come from Troy (CMS V Suppl. 3 no. 455), to do justice to settlement finds as well. There is likewise none from any of the littoral islands discussed here. Nevertheless, one can summarise certain aspects: most of these are of the Mainland Popular Group, with ornamental/abstract decoration. The only more elaborate seals come from Troy (Cut Style) and Baklatepe, both stylistically earlier than LH IIIA2. The Trojan example was found in a likely secondary use, as it is from a Troy VIIb1 context (LH IIIC Early). Also striking is the preponderance of seals made of bone at Beşik Tepe (4x) and Troy (1x). Most of the remaining ones are made of steatite. The evidence in the Lower Interface is not any richer, but important funerary contexts such as Değirmentepe and Müsgebi remain unpublished and so discussion must wait. In stark contrast to this picture is Rhodes, with 15 seal finds known so far (CMS database), mostly from Ialyssos (Benzi 1992). However, not all are securely from Ialyssos and only 7 are stylistically LH III. The absence of any Mycenaean seals in the Eleona and Langada cemeteries on Kos should also be mentioned. That is certainly no coincidence.<sup>14</sup>

### **Cemeteries**

The evidence collected from cemeteries deserves special consideration. The multiple compositions of cemeteries (a variety of tomb types and body treatments within single sites) connects sites at some distance from each other (Beşik Tepe, Panaztepe, Psara/Archontiki), whereby it seems to be the cultural trait of Western Anatolian funerary behaviours. This aspect is also well rooted back in the EBA and in particular after EB II late, when important shifts are visible, such as the appearance of different tomb types in the same cemetery and the presence of social distinction, as suggested by the composition of grave goods (Massa and Şahoglu 2011, 167–168). Likewise, indications of social differentiation are traceable in the location of important graves with wealthier offerings clustering in specific areas of the cemetery, such as at Demircihöyük (Seeher 1993). Interestingly, during the LBA, this pattern does not change with the arrival of Mycenaean pottery and/or through interaction with any Aegean population groups.

Evaluating the presence or absence of Mycenaean groups using the sole evidence of tomb type as ‘ethnic’ markers might be dangerous. Indeed, the Mycenaean character of the small tholos tombs of Panaztepe (and probably one can add that at Psara) has been variously questioned (Mee 1998, 140; Basedow 2000, 153; Müller Celka 2005, 253).<sup>15</sup> On the contrary, the absence of proper chamber tombs, such as

those found at Müsgebi, Değirmentepe, and particularly at Kos and Rhodes,<sup>16</sup> highlights specific culture choices of the local groups. A link has been argued for between the cist graves (sometimes quite large) of Chios, Lesbos, Panzatepe and Psara and Central Greece, where cist graves and built-chamber tombs did proliferate (Cavanagh and Mee 1998, 62, fig. 6.1). On the one hand, the evidence of the deeply Mycenaeanised Psara was considered a clue for proposing a ‘colonial’ model (Papadimitriou 2001, 146). On the other hand, it has been stressed as a pre-Mycenaean local tradition (Dickinson 1983, 62), which runs parallel to the Shaft-graves and the later tholos tombs, related to the ‘proper Mycenaeans’ in the Argolis (Papadimitriou 2001, 207 ff.).<sup>17</sup>

In our view, setting aside the isolated cases such as those on Chios and Lesbos, the evidence from Beşik Tepe, Panaztepe and Psara/Archontiki shows a similar blend of funerary patterns that might betray the internal social organisation of Anatolian groups, where social differences were expressed by using different body treatments (inhumations vs. cremations) and tomb receptacles (cist, pithos, pit, built chamber tomb, tholos tomb). Mycenaean traits are much more relevant in the composition of grave offerings than in the funerary behaviours as such, and, therefore, they do not represent evidence of settlers from the Greek mainland. Moreover, it is better to imagine a process of interaction which allows different local groups, according to their own set of behaviours and local/native culture, to select and incorporate specific aspects of Mycenaean funerary rituals. Therefore, we juxtapose cases where Mycenaean vessels, weapons and ornaments constitute a majority in the composition of the grave offerings (Psara and Emporio), and cases where the Mycenaean pottery represents only a smaller percentage, being well mixed with pots of local wares (Panaztepe, Beşik Tepe). At the same time, the cultural choices did involve also the adoption of specific customs, such as the smashing of kylikes or drinking cups in the entrance passage of the tomb, documented at Tomb 15 at Beşiktepe (Basedow 2000, 47–48, Pl. XXXII).<sup>18</sup> This is a liminal rite frequently interpreted as a ritual separation carried out before or after the closure of the tomb and usually indicated by kylikes found in the *dromos* (Cavanagh and Mee 1998, 112).

To sum up, during the period of stronger influence from mainland Greece (LH IIIA2), among the many possible Mycenaean cultural traits, very few can be detected in the NE Aegean. Pottery imports are – as expected – the most widespread element and are mostly of Argolid origin; then the evidence collected shows that jewellery is pretty much comparable with what is known on the Greek mainland, alongside seals and metal tools and weapons. Although the latter cannot be discussed here for reasons of space, preliminary observations strongly indicate that if all evidence for metal objects down the Interface gets collected, distinctive elements will come out, making it a region on

its own, even if strongly influenced by the Mycenaean side (Kilian-Dirlmeier 1993, 48–49, Pl. 18: 97–100, Hörnschwerter Type 2b1, termed by Kilian-Dirlmeier as *Variante Siana*). Our feeling is therefore that these four elements – pottery, jewellery, metals, and seals – represent an intentional selection of a Mycenaean material culture package that has been incorporated by the local population. This mechanism is well visible along the Northern and Central Interface; then the Southern Interface could play along very well too, with Rhodes as a case on its own.

### Comparing Minoanisation and Myceanaenisation in the Northeastern Aegean

In order to answer one of the main questions of the original workshop (*i.e.* to compare the two processes in the same area) it would be crucial to see to what extent Minoan influence was really a precondition for a successful later Mycenaeanisation, following the model sketched by P. Mountjoy (1998) for the Lower Interface. Now that we do know that there *was* a Minoan presence in the NE Aegean, how does it change our view of the later Mycenaeanisation? Although the evidence does not allow the tracing of a continuum at any single settlement in the Northeastern Aegean (with the sole exception of Troy), it appears that the preceding Minoan presence did not play a major role in facilitating the later interaction with the Mycenaean world. In that sense, in both periods this area is characterised rather by *absences* of evidence, being represented almost exclusively by pottery.

Even though it is clear that ‘Minoans’ did arrive in the North East Aegean islands, the relatively meagre evidence for this (discussed above) indicates that they very likely did not spread to all of the NE Aegean islands, not to mention the Northwest Anatolian Mainland. Troy and Thermi teach us a good lesson in this respect: despite the existence of high numbers of imported or locally imitated hybrid shapes/wares, we have no real evidence for a proper *contact stage*. The problem arising from this picture is to understand how this hybrid fashion spread without a preceding contact. The cases of Samothrace and Lemnos epitomize in our view two potentially explanatory models. It is in fact likely that the contacts with Samothrace in MM II were an expression of some centralized Cretan action, whereas the growth of contacts at the end of the MBA, largely generating the hybrid outcome, need not have been promoted directly from Crete, but could have stemmed from interaction among the NE islands themselves. Equally, one cannot rule out that what we observe is not necessarily the consequence of a ‘Minoan’ choice, but likely also the result of a conscious resistance by local culture, expressing itself through the refusal of purely Minoan shapes, possibly not compatible with the local habits and needs.

In the course of writing this paper, we also started wondering where to place sites such as Emporio and Çeşme? By the traditional dichotomous division into Upper and Lower Interface, these should be in the Upper Interface. However, unlike the islands and areas further to the North, these two sites actually show many links to the South, both in terms of shapes and decoration. One should, however, not forget that we have no proper MBA from Emporio and the MBA from Çeşme is entirely local (Central Western Anatolian), with just a few imports. It is only the LBA 1 pits that become ‘southern’. Nevertheless, by LBA 1 both sites could easily fit the Southern interface as well, certainly on the level of sites such as Iasos. Perhaps a separate concept of Central Interface should thus be developed.

To sum up, some aspects aside, contact with the ‘Minoan world’ did not produce sweeping changes in the local NE Aegean habits. The islands show evidence for the adoption neither of any Minoan architectural style and frescoes, nor of funerary customs, rituals or religious symbols. The distinct absence of features such as ashlar masonry, pier-and-door partitions, Minoan Halls, etc., goes hand-in-hand with the persistence of the local building tradition, which does not show any change throughout the process of ‘Minoanisation’. It is likewise clear that one encounters a different development here, compared with the situation in the southern Aegean, and in the Cyclades in particular. Nevertheless, the Minoan presence in the NE Aegean entails several non-uniform and fluctuating scenarios not sufficiently investigated thus far. Namely, the inference that a direct Minoan presence might have offered to this remote world an important ingredient that allowed the islands to coalesce into a larger aggregate. This new horizon that we have identified under a ceramic hybrid culture involved both the islands and the Anatolian coasts and devolved again into a new local world.

A second key point is to understand what happened between the end of more or less active Minoan presence on the islands at the end of LM IA, and the beginning of a more intense Mycenaean presence by LH IIIA2 (in whichever form).

With some confidence, we can state that a mature stage of LB I is a borderline for this region. Indeed, LM IA imports are absent on Samothrace, and not overwhelmingly present at Koukonisi. The Thera eruption can certainly be invoked here. Likewise, one cannot rule out the steady weakening of the Minoan palatial centres and at the same time the fact that, further south, Miletus and Rhodes show a growing and stronger Minoan character.

However, the main question of this ‘transitional’ period is *why*? Why did Minoan interest cease in the NE Aegean and to where was it transferred? Since the search for raw materials, with both Thrace and the Troad being rich in copper, gold and silver, is still a valid explanation for the MBA Cretan interest in the North, one has to wonder what

caused the shift towards Cyprus during LM IA and LM IB. The evidence from Cyprus indicates that any large-scale exploitation of the copper ores only came into being in the 15th century, which would be right after the end of Minoan involvement in the NE Aegean (Bartelheim 2007, 155–158, 407–416; Belgioro 2012). That is perhaps no coincidence. Maybe what we see is also a change from palatially administered trade with ores (*e.g.*, the roundels in Mikro Vouni) to either non-palatial means, or some third party organising the trade (with Cyprus in this case).

In such a scenario, the islands were likely not deserted in between. Looking at the material culture, no ‘third’ or ‘in between’ typological ceramic tradition is indeed recognizable. Instead, it seems that the *hybrid culture* simply continued throughout the LH II period and underwent another turn only in LH IIIA2. In that sense the Upper Interface is not so much more different from the situation in the SE Aegean during LH II, but there one can see a much stronger impact of Mycenaean culture in LH IIIA and not only in terms of pottery (Benzi 1992; Mountjoy 1998; Karantzali 2001; Girella 2005; Vitale this volume; for the Lower Interface in this transitional period, see now Georgakopoulos 2012).

Delving in more detail into the data, one gets the impression that there must have been some more profound difference between the populations in the NE Aegean and the SE Aegean. Whereas the SE has reacted more positively and possibly less reactionary already to Minoan influence, and the Mycenaean influence simply followed on the back of it, the Northeast shows surprisingly strong evidence for an active and creative approach when it comes to accepting new styles/fashions.

Thirdly, having landed by now in the developed LBA, one needs to ask the following: What did change – and again, when – to trigger such different reactions to potentially similar impulses? Are we witnessing different impulses towards the NE and the SE Aegean respectively? Were they similar in the Minoan period but different in the Mycenaean? Our feeling is that the differences might have resulted from the different ways of organizing and controlling trade employed by the ‘Minoans’ and ‘Mycenaeans,’ which in turn generated different local responses; however, the likely key element to understand how these processes evolved in different directions seems to be the diverse response of local populations to foreign material culture. While the material culture of the NE Aegean islands shows a degree of resistance by the local population against traits of Minoan origin, the SE Aegean islands had no need to completely reject such foreign practices. And more importantly, this different attitude might have generated potential bases for migrant communities towards the SE Aegean over the generations and left the NE Aegean unaffected by immigrants. Thus, it seems that the ‘more successful’ Mycenaeanisation in the SE Aegean was not necessarily the result of the previous

higher degree of Minoanisation, but both are the result of different local responses to outside impulses.

These points lead inevitably also to the question of control. Although it seems that hierarchy in the NE Aegean was nonexistent, it is however not a straightforward matter to deduce the lack of any political control. Judging by the written documentary evidence (Linear B and Hittite), it seems that there must have been some kind of power involvement in the NE Aegean after LH IIIA2, since we have references to movements of people to the Greek and Anatolian mainlands from the islands (Chadwick 1988; Olivier 1996–1997; Nikoloudis 2008, 47–49; Singer 2008; Hoffner 2009, 290–296). However, it is as yet impossible to see any reflection in the material evidence and it is likely that ‘Mycenaeans’ controlled only certain spheres of the economy, without exercising any political control in the area.

Back to the pottery evidence, one can notice some degree of unification in the NE during the *hybrid stage*, which is well graspable on most of the islands (and likely even all the way down to Tavşan Adası: Bertemes 2013), but whereas in the MBA the Minoan impact led to a creation of a holistic hybrid concept, with almost a completely new set of shapes, we do not see this happening in the developed LBA. Judging by Thermi and Troy, the use of Mycenaean shapes in the local wares, especially their non-standardized versions, could be taken for single hybrids, they remain few and the local non-Mycenaean shapes develop on their own, following rather some natural trajectories, such as can be observed also further inland, where Mycenaean pottery cannot be expected to be the main vehicle behind such development. Mycenaean pottery (imports or local imitations), along with Mycenaean shapes in local wares, simply complements the local culture, as some kind of added bonus, but it does not lead to the creation of a completely new culture. As for cooking habits, we can see that in the pottery consumption pattern again an almost ubiquity of local (non-Mycenaean) shapes, especially from well documented settlement histories such as Troy.

Having ascertained that the process of Minoanisation did extend into the NE Aegean as well, the question should no longer be to what extent, but rather in which specific ways the later process of Mycenaeanisation was different. In both cases, some physical presence is to be expected, but what we mainly see is local emulation. Moreover, while in both instances, objects and ideas from outside the immediate region were reinterpreted and merged to form new syntheses, our feeling is that we are facing two rather different processes.

Whereas Minoanisation led to the creation of a new and full-blown hybrid culture, Mycenaeanisation did not. While the latter did result in the creation of some hybrid elements, they complemented, rather than replaced the otherwise ‘local’ LBA material culture. The question that should be asked now is, what factors lay behind these two different

processes? Could it be that they reflect the two different ways in which Minoan and Mycenaean societies/states were organised (*cf.* Galaty and Parkinson 2007)? Our gut feeling is that the differences might have resulted from the different ways of organizing and controlling trade employed by the Minoans and Mycenaeans, which in turn generated different local responses.

In this sense, hybridisation practices facilitate our understanding of the ways in which foreign material cultural traits were variously incorporated, rejected or transformed into something distinctive. In analysing Minoanisation and Mycenaeanisation in the NE Aegean it becomes clear that hybridity implies an unsettling of identities, where the self and the other encounter, with potential miscommunication and intercultural conflict. This tells us that hybridity, the very condition of being ‘in-between’, can never be a question of simple shaking hands, of harmonious merger and fusion, but rather a heuristic device for analysing complicated entanglement.

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## Notes

- As noted by the scholar, flasks are documented only in *Poliochni Yellow* and not in the following *Bruno* and *Violet* periods. For lentoid flasks on Lemnos during the MBA, see Boulotis 1997, fig. 27 (Koukonisi).
- The sherd has been identified by Peter Pavuk among sherds from Lamb's excavations kept in the Museum of Archaeology and Anthropology, University of Cambridge, Box I9-64.29.
- Actually, Cretan specimens always have horizontal handles, while on the vessel from Liman Tepe they are vertical.
- The ‘dark faced incised’ lid imported from the Cyclades and found in a CB 2b context cannot be dated this closely, and seems rather to be even earlier.

- 5 With kind permission of the British School at Athens (PP).
- 6 With kind permission of the British School at Athens (PP).
- 7 For the loom-weights, see Hood (1982, 632–633, fig. 285: 29, Pl. 132: 29). There is a fragment of a blue-grey marble lamp of a Cretan type (Hood 1982, 646, fig. 289); the remarkable stone mould for making butterfly-shaped ornaments is datable to the very beginning of LBA (Hood 1982, 654, fig. 293: 39, Pl. 137: 39; 1986); possible two clay lamps represented by three fragments (Hood 1982, 619, Pl. 123: 2969).
- 8 It is possible that sealings and seals on other sites simply were not discovered because of excavation techniques (unlike Samothrace).
- 9 Pers. comm. Zora Miklíkova and Tatiana Theodoropoulou, work in progress.
- 10 Calculated on finds published by Mountjoy (1997; 2008; Mountjoy and Mommsen 2006).
- 11 While Cultraro (2005, Pl. LXIIIc:6–11) considers the six conical cups LH IIIA, this date can be accepted only for two (*Idem*, Pl. LXIIIc:7–8; Bernabò Brea 1976, Pl. CCLXXXII: k–l); the other four cups are more at home with a MM III–LM I date.
- 12 It is likewise also not clear from Hood's publication how much pottery was actually published. Visits by P. P. to the museum in Chios revealed that, for example, at least half of the Matt-Painted ware indeed remained unpublished.
- 13 A visit by P. P. in summer 2010 to the site revealed that in the area of the ramp, there were still on the surface many unpainted fragments which were in non-Mycenaean shapes and typologically belonged to the second half of the LBA.
- 14 Interestingly, there *are* seals in the Eleona and Langada cemeteries, but they are all of Near Eastern and Egyptian origin, and mostly from LH IIIC contexts (Morricone 1967, 80–81, figs. 55–56 [Eleona, T. 22, LH IIIA1, two cylinder seals], 115, fig. 96 [Langada, T. 12, LH IIIC?, scarab], 198–200, figs. 207–208 [Langada, T. 42, non-datable, scarab], 225–226, fig. 244 [Langada, T. 50, LH IIIC, scarab], 268, figs. 300–301 [Langada, chance find, scarab]; datings after Vitale, in this volume). This is not unlike the two scarab finds from Panaztepe (Jaeger and Krauss 1990 [Pithos grave L, LH IIIA2; Pithos grave in square N-11, undated]; dating after Günel 1999).
- 15 Their dimensions, technique, and chronology (older than LBA) have raised the issue of a possible Cycladic origin: Müller Celka 2005, 253. This specific aspect leads us to reflect on the capacity of these local communities to maintain interactions with the Aegean world already in the EBA (Şahoglu 2005, 352–353; Massa and Şahoglu 2011, 169). As for the burial customs, see the cases of Iasos for the cist graves (Pecorella 1984), and Çeşme-Boyalık for the rock-cut chamber tombs (Şahoglu, Vural, and Karaturgut 2009).
- 16 For a Cretan connection, see Müller Celka 2005, 255–256.
- 17 Similarly, Ersoy (1988, 62) on the tombs at Panaztepe with Mycenaean pottery.
- 18 The rite is attested in the Greek mainland (Prosymna) (Blegen 1937, 237–238, 242), but also at Kos (Eleona, Langada), Rhodes (Ialysos and Pylona) (Benzi 1992, tombs 5, 38, 49, 53, 59; Karantzali 2001, 23; Girella 2002, 144; 2005), and Möskebi (Carstens 2001, 96–98).

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# MINOANISATION, MYCENAEANISATION, AND MOBILITY: A VIEW FROM SOUTHWEST ANATOLIA

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## Introduction

The material culture of Late Bronze Age (LBA) southwest Anatolia exhibits significant affinities with the Aegean, showing that settlements in the former region were closely tied into the social, political, and cultural networks of the latter. It is no wonder, then, that themes of connectivity and contact – mobility, trade, exchange, material transformations, and hybridisation – have figured prominently in the current discussion of the cultural dynamics of this part of the Mediterranean system (*e.g.*, Mee 1998; Knappett and Nikolakopoulou 2005; Manning and Hulin 2005; Collins, Bachvarova, and Rutherford 2008; Davis and Gorogianni 2008; Maran and Stockhammer 2012). Specifically, the incorporation of Aegean traits into the material culture of southwest Anatolia has often been explained in terms of acculturation, and more recently of hybridisation. Within this framework the phenomena of *Minoanisation* and *Mycenaeansation* have been at the forefront of archaeological debates for some time now (for the Aegean see Wiener 1990; selected contributions in Laffineur and Greco 2005, and Macdonald *et al.* 2009). At the core of these explanatory models lies the assumption that material culture change in the ‘periphery’ was spurred on by transformations in what have traditionally been perceived as ‘core’ cultural zones, Minoan Crete and the Mycenaean mainland. Explanations of this kind have often tended to focus on questions of material transfer through trade, exchange, and diffusion. The movement of objects, however, is inexorably the outcome of a much wider spectrum of different forms of human interaction, including small scale and short-range migrations and the accompanying dynamics of cultural encounters. The inhabitants of Anatolia were intensely engaged with and responded to not only transacted

objects and ideas, but also people involved in selective and directional mobility networks.

The main purpose of this paper is to demonstrate that while Minoanisation and Mycenaeanisation share some common characteristics in terms of the underlying parameters of interaction, including selective appropriation of non-local stylistic elements (and in some cases also technologies) by Anatolian communities, they diverge significantly with respect to the scale and rate of local responses to the changes in communication networks, in which both objects and people were mobile. Communities incorporated material culture from other participants (whether objects, production and technological know-how, or ways of life) as determined by local developmental trajectories, which prompted them to selectively appropriate and adapt relevant traits from other participants in their sphere of interaction. Moreover, these phenomena should be understood not only in terms of continuing mutual receptivity resulting in the creation of ‘international’ east Aegean/southwest Anatolian styles, but also in the context of different kinds of small-scale migration across the Aegean sea and the Anatolian littoral – which created an interconnected milieu of familiar places and people, a shared knowledge base, and commensurate economic systems.

The geography of southwest Anatolia has profoundly shaped the course of its cultural, economic, and social development. The mountain ranges to the east of the coast separated the land mass into a number of distinct microregions, which in turn channelled the main communication routes to central Anatolia through the two large valleys of the Hermos and Meander rivers, and it should not come as a surprise that southwest Anatolia, physically separated from the areas further inland, has always been deeply affected



Fig. 3.1: Map of east Aegean and southwest Anatolia showing sites mentioned in the text (Courtesy of Lorene Sterner).

by the maritime sphere. This coastal region, roughly equivalent to the extent of what P. Mountjoy described as the LH IIIC Lower Interface together with the southern part of the Upper Interface, the area around modern-day Izmir (1998), comprise the focus of this contribution. While most Minoanising and Mycenaeanising features, in fact, are concentrated south of the Meander River in the vicinity of the Aegean coast, the tributaries of the Meander River and the Hermos River valley are also incorporated into this discussion because of their importance in communication with the interior (Fig. 3.1).

### The ‘-isation’ Paradigms in Aegean and Anatolian Archaeology

From the early archaeological explorations numerous projects were launched to examine the relationship between the Anatolian littoral and the rest of the Aegean.<sup>1</sup> Usually, the extent of southern and western Aegean (Minoan or Mycenaean) presence (often considered in terms of uneven distribution of economic and political power as a part of a colonization enterprise of the Aegean peoples) was assessed by a ‘check-list’ of attributes. Added points were given to the material assemblages that had a more complex array of

what were considered to be Minoan or Mycenaean cultural indicators: pottery, architectural features, system of weights, and the occurrence of Linear A and B writing, among others (for critique, see Broodbank 2004; Momigliano 2009, 121–122). Ultimately, the presence of these cultural markers was directly linked to the presence of foreigners exerting dominant political and economic control of the settlement in question. Within this framework, southwest Anatolia was perceived as peripheral to the more ‘dynamic’ Aegean.

Models focused on the circulation of Minoan and Mycenaean objects outside of the core zones (of Crete and the Greek mainland) offer explanations such as *thalassocracy*, and political, economic, and/or cultural colonization. The impetus for these models stems from the differential circulation of Aegean and Anatolian objects – that is, the fact that the amount of Mycenaean and Minoan objects retrieved in Anatolia exceeds the amount of Anatolian items found in the Aegean region (Cline 1991; Georgakopoulos 2012, 139ff). The wide geographical distribution of artefacts alone, however, should not be taken as adequate proof of one theory over another; rather, a heterogeneous range of material traits needs to be taken into consideration. In southwest Anatolia the principal zones of interaction were centred on selected nodes along the Aegean littoral, which constituted the hubs of maritime-based trade and exchange. Isolated Minoan imports, which started appearing as early as late MM III/LM IA Early (corresponding to LB I in local chronology) at Limantepe and Miletus, consisted of rather limited classes of material, primarily restricted to pottery and other portable objects (Niemeier 1999; Erkanal and Keskin 2009). Even though the number of these imports increased throughout the mature Neopalatial period, none of the buildings excavated to date can be identified as residences of ‘Minoan governors,’ which were considered the material trademark of the governed colony in the classification proposed by K. Branigan (1981). While the model for the spread of the Mycenaean material culture proposed by K. Kilian explicitly acknowledged that there was no single form of Mycenaean colonization, it nevertheless operated under the implicit assumption that the circulation of movable objects would not have happened independently of the settling of the Mycenaeans (Kilian 1990).<sup>2</sup> Altogether, none of these models can explain fully the patterning of the material culture during the LBA in the region. Even the evidence from the ‘Minoanised’ and ‘Mycenaeanned’ type sites, with Miletus being the Anatolian champion, does not fit into Branigan’s category of ‘settlement colonies’.<sup>3</sup>

In the past two decades, the terms *Mycenaeanned* and *Minoanised* have come to describe how the culturally specific Mycenaean and Minoan ways of life – archaeologically reflected through objects, materials, their use, and practices associated with them, such as cooking habits – were incorporated into the cultural repertoire of, and also emulated by, other groups living around the Aegean.

As such, these concepts are fundamentally grounded in the broader theoretical framework of hybridisation (Bhabha 2007; Stockhammer 2012). Ultimately, hybridity, Minoanisation, and Mycenaeanisation are modern constructs that describe a degree of cultural mixing in a specific period of the ancient past; the manner in which these constructs are employed in the archaeological discourse, nonetheless, tends to mask material heterogeneity in various ways. First, these terms are applied to long periods of time and large regions, flattening variations over time and space into one homogeneous entity. Second, the Aegean was not inhabited by distinct ‘pure cultures’ to begin with. Generally, the term ‘Minoan’ has referred to the material culture of Crete from the EBA through the MBA and early LBA, while ‘Mycenaean’ designates the material culture of the inhabitants of LBA polities on the Greek mainland, whose roots can be traced back to the end of the MBA period (Broodbank 2004, 50ff; Wright 2004, 14; Feuer 2011, 509).

Yet, bounded cultures and well-defined populations with distinct identities may not have been common in the past due to contact and general permeability of cultural boundaries (Van Dommelen and Knapp 2011, 1–3). The variation of material culture in time and space within Crete and mainland Greece argues against the existence of pure cultures or discrete cultural packages.<sup>4</sup> As C. Broodbank has stressed in his seminal article on Minoanisation, Crete itself was never homogeneous in terms of its material assemblages. The material cultures on the island were substantially transformed during the Protopalatial and Neopalatial periods, as demonstrated by the presence of diverse regional traditions in the early periods, followed by transformations under the influence of the large palatial polities; Crete itself underwent major ‘Minoanisation’, defined by Broodbank as a mixture of elite emulation, social competition, and the transformation of island-wide economic and ideological networks (2004, 51–52). A similar argument can be made in the case of the Mycenaeans. The rise of the Mycenaean palatial centres followed a broadly similar pattern. Here the individual polities seem to have remained politically and economically independent, especially during the formative LH I period as each Mycenaean region developed along its own trajectory (Feuer 2011, 515). Thus, labelling objects found in western Anatolia as Minoanised or Mycenaeanised, though a convenient scholarly convention for the purpose of classification, is misleading for two reasons. First, this practice masks the importance of local response. Second, it obfuscates the heterogeneity of the material cultures on Crete and mainland Greece – objects were created under specific social, political, and economic configurations nested within a wider cultural sphere, and it is a mistake to envision everything within that sphere as constituting a single archaeological culture.

Recently, new studies working on the micro-scale of archaeological investigations of social transformations

(focused in particular on technological transfers and modes of production) have set aside generalizing strategies and emphasized instead the more specific elements of material production and use (e.g., Raymond 2007; Maran and Stockhammer 2012). Even though new interpretative frameworks have brought about a more nuanced understanding of the processes that gradually transformed the east Aegean and southwest Anatolia during the LBA, current scholarship favouring the hybridisation paradigm tends to attribute these changes to economic causes and elite emulation above other kinds of sociocultural transmission. Although the role of local populations in determining the nature of the interactions has been stressed in recent scholarship (often with the focus on elite emulation or trade relationships), they are often considered to be receptive only to products moving within exchange networks. While it is indisputable that these forms of transmissions may have produced archaeologically observable outcomes – an introduction of a new range of objects, technologies, and modes of production resulting in a heterogeneous material culture employed in new social contexts of consumption – it can be argued that such deep changes cannot be separated from not only the movement of people, but also their ability to stay for periods of time. During the LBA, the Aegean and southwest Anatolia formed a cultural unit, one of whose principal characteristics was an unusually mobile population. Combining the coastline of Anatolia and the islands of the Aegean Sea into overlapping zones of communication, this ‘interaction sphere’ comprised interfaces characterized by different modes of travel, transfer of objects, information, and knowledge. Coastal zones, by definition, carry the potential for increased mobility; they are arenas in which heightened contact can blur cultural differences.

## Mobility of People

Material connections expressed through the distribution of objects remain vital to the reconstruction of human activity in the past. The archaeological record, however, is often ambiguous and archaeologists have difficulty distinguishing between movement of peoples and technological and material transmissions. Central to the present study is the concept of small-scale and frequent, semi-permanent or permanent mobility of diverse groups of people within an area with which they are already familiar. Since a consideration of this specific range of movements subsumed under the umbrella of *mobility* have been born out of migration studies, it is useful to reflect how the movement of people has been conceptualized within the discipline of archaeology.

Until the mid-20th century, human movement was widely assumed to lie behind observable changes in the material record, but this notion has since been dismissed as too simplistic of an explanation for cultural change. Within

the early 20th-century culture-history paradigm, migrations were considered large-scale phenomena involving the displacement of a substantial portion of population (Anthony 1990, 896–897; Chapman and Dolukhanov 1992; Hakenbeck 2008, 14ff). Within Aegean studies, the introduction of Greek material culture into southwest Anatolia during the second half of the 2nd millennium BC has often been conceived of along similar lines. With the rise of New Archaeology and its emphasis on process and internal stimuli as causes of cultural change, these previous reconstructions came under sharp critique (Adams *et al.* 1978). In response, some scholars strove to break free of the traditional models and instead focused on the processes and dynamics of population movement (Schofield 1983; Anthony 1990; 1992; 1997; Härtke 1998; Burmeister 2000). These approaches have proposed more nuanced models of ‘migration’ that account for heterogeneity; rather than consisting simply of large-scale movements of socially bounded ethnic groups, migrations are social enterprises involving a specific subgroup of a population usually sharing kinship ties (Anthony 1992, 174).

Investigations of past migrations should focus not only on a broad spectrum of physical movement of people, but also on the material changes detectable in the sociocultural milieu. Different types of movements can be identified depending on various factors such as the social profile and size of the group that decides to move, choice of destination, form of transportation, and goals and motivation. Groups of different sizes can decide to relocate on a local, regional, or even long-distance scale for a variety of reasons of which social and ideological factors are equally as important as economic ones (Anthony 1990; Burmeister 2000). Hence, various forms of migrations – local, long distance, chain, return – can be considered as outcomes of the interplay of negative feedback from the homeland (or the so-called push factor), positive attraction of the target destination region (or the pull factor), and transport options (Rouse 1986; Anthony 1990, 902–904; Schofield 1996, 41–42; Snow 2009, 10–11).<sup>5</sup>

Often, there is no sharp distinction between migrations and these other kinds of interactions, since different modes of cultural transfer co-occur with and complement each other. Trading, for instance, can spur more permanent kinds of relocation, as it makes some people aware of new opportunities in distant places, inciting them to leave their homelands either temporarily or permanently. Exchange of knowledge is a crucial prerequisite as it provides information about potential routes and destinations (Anthony 1992, 174). Studies of migrations in the more recent past have documented participants moving along certain routes to a number of specific destinations – migrations do not happen in waves but in streams whereby people follow a known route and use similar means of transportation (Schofield 1996, 46; Anthony 1997, 27; Burmeister 2000, 546ff). The

observation then can explain why some settlements attract more international attention and tend to receive a larger foreign population as a result.

Contrary to early assumptions, past migrations are highly heterogeneous processes. Relocation does not usually consist of a large-scale influx of a homogeneous population; instead, differently-sized groups or even individuals move back and forth, even if the overall imprint on material culture might cumulatively appear as homogeneous. Often, groups consist of an admixture of people of varying social standing, gender, and age. Depending on the group size, composition, collective motivation and goals of the group, movements can take many different forms. To reflect this variable nature of migratory phenomena, a more inclusive notion of ‘mobility’ has come into use (Lightfoot 2008). Mobility is a useful term, which encompasses a range of interactions of differential intensities and frequencies along a single continuum. Admittedly, the concept of mobility is broad, but it allows us to move away from the simplistic distinctions between migration, colonisation, trade and other forms of interaction by encompassing a spectrum of gradated forms of movement. Thinking in terms of ‘mobility’ of peoples, moreover, allows us to reconsider our preoccupation with origins and destinations in order to move toward more complex considerations of interactions.

Because of the heterogeneous nature of migratory phenomena, it is very difficult to trace movements archaeologically. The primary reason for this is that cultural and social identity is often flexible rather than fixed, and movement has a pronounced effect on the way people think about themselves and others, as well as on how they relate to objects around them. During a move, migrants may wish to renegotiate their identities and to adopt new sociocultural markers depending on their need, which makes the material identification of migrants particularly challenging (Burmeister 2000, 541; Snow 2009). Migrants may, for example, adopt the material culture of their destination, and the easiness of such transfer may depend on the degree of cultural closeness between incoming and local groups. The newly formed community may also choose to establish its own independent identity, articulated through processes of cultural mixing (Anthony 1990, 896). At the same time, as migrants renegotiate their identity, the local population may also choose to incorporate new (foreign) markers as expressions of the new reality (Sherratt 1992, 325–326). In short, both the incoming and the local population will change and assimilate to a certain degree, which affect how they relate to the physical world around them.

Despite the diversity of possible responses to new social milieus created by human mobility, there are some general patterns that can inform our approach. Migrations in archaeology are usually discerned through indirect means of evidence – including not only material objects, such as

possessions and belongings, equipment, and tools, but also the knowledge and technological know-how of the mobile population. These are often considered to make up a package indicative of immigrants’ cultural affiliation. The association between migrants and objects – between pots and people – is, however, complex, depending in part on what kinds of objects migrants are or are not able to bring with them to a new place (Burmeister 2000, 540). For this reason, it might be more productive to look for traces of incoming groups in the introduction of new cultural and spatial practices, rather than in the appearance of new objects alone. During contact, cultural transformations tend to occur at a faster pace among the upper levels of the socio-economic hierarchy and in the public settings, as both indigenous and incoming groups define themselves in relation to each other and establish relationships (Burmeister 2000, 542; Yasur Landau 2010, 16ff). Activities within the domestic sphere, however, tend to remain more conservative (Lightfoot *et al.* 1998; Paz 2009). In short, while the presence of a relatively narrow range of foreign objects might be a result of trade, exchange or elite emulation, deeper changes, such as technology transfer and new spatial use of domestic assemblages, may be clearer markers of the introduction of a new population.

Within the Anatolian context, it can be hypothesized that the most conservative assemblages belong to the domestic setting and comprise classes such as the utilitarian pottery. Additionally, the structure of a settlement in terms of location and configuration of houses might also be a highly diagnostic trait, while categories such as pictorial art, especially in the form of frescoes, as well as writing and monumental architecture might not be highly indicative of deep-seated cultural changes. When addressing issues of population change, burial evidence is often invoked as one of the main indicators of the presence of foreigners,<sup>6</sup> but the complex relationship between manipulation of identity and material culture, as discussed earlier, is also manifested in the funerary record. We cannot rely on the assumption that the treatment in death reflects some predictable relationship to an individual’s status in life and to the organization of society to which the individual belonged (Parker Pearson 1999, 73ff). Therefore, funerary data should be used with caution.

### Tracing Mobility in Southwest Anatolia

Investigations of mobility in western Anatolia during the late 2nd millennium BC draw on two types of resources – written texts (Mycenaean Linear B tablets and Hittite diplomatic records) and material culture. Although both attest contact and some form of population exchange,<sup>7</sup> there are significant challenges in working with these sources in tandem for they provide discrete kinds of information and function at different scales of resolution (e.g., Leone

2007; Sherratt 2011). Textual evidence clearly points to different kinds of physical movements of people in the LBA Mediterranean. For instance, in addition to Hittite texts mentioning diplomatic contacts between Anatolian and Mycenaean rulers, the Linear B tablets (dating to the 14th and 13th century BC) indicate a physical movement of people from Anatolia to the Mycenaean territory to join the workforces used by the palaces (Ergin 2007; Nikoloudis 2008).<sup>8</sup> This very specific scale of human mobility at the level of just individuals or small groups of individuals is, however, extremely difficult to isolate archaeologically.

If we turn back to the Anatolian data, it becomes clear that prior analyses are based on an extremely fragmentary archaeological record. One of the most serious obstacles is the paucity of excavated sites and fully published site reports. While the Cyclades, the Dodecanese, and Crete have received a great deal of archaeological attention, most Anatolian sites are known only through limited excavations and surveys. This is the case even for Miletus and Iasos, the two important southwest Anatolian sites (as emphasized by Momigliano 2009 and Benzi 2013). The situation is further complicated by our overreliance on the Aegean and Mesopotamian periodisation for anchoring western Anatolian chronologies, with Troy being the only exception (Pavúk 2015). In addition, certain classes of evidence, such as the painted Minoan and Mycenaean wares, tend to receive special emphasis in publications, making it difficult to form a comprehensive picture of a site's assemblages. These obstacles may be some of the reasons why scholars have favoured 'check-list' approaches to identifying cultural interaction, based on the presence and absence of what are considered culturally significant traits, as opposed to focusing on the daily practices of inhabitants of settlements. In effect, such approaches inevitably create a somewhat homogenising image of the archaeological record. In order to mitigate this, scholars often operate either at macro-scales, expanding the temporal and spatial frame of analysis to make up for the coarse chronological resolution of data, or at micro-scales, focusing on individual objects, an approach which, while extremely informative, makes the archaeological study of patterns of behaviour during population movement, whether by groups or by single individuals, difficult. Despite these obstacles it is possible to detect some patterns in the distribution of foreign elements in southwest Anatolia.<sup>9</sup>

The following review of evidence is by no means exhaustive; rather, it seeks to identify broad patterns that might provide a stepping stone to the examination of human mobility in the region, focusing on evidence from settlements, which are environments in which people could articulate their habitual behaviour. Principal sites discussed in the text that incorporated Minoan and Minoan-looking ceramics and architecture into their repertory – Miletus, Iasos, Teichoussa and Tavşan Adası – are located on the

stretch of the Anatolian littoral framed by the Aegean islands Samos and Kos. The second cluster of settlements located close to the island of Chios consists of Çeşme-Bağlararası and Limantepe, but here the links are demonstrated only in terms of ceramic exchange. Miletus and Iasos in the south and Çeşme-Bağlararası and Limantepe in the north also yielded good evidence for connections during the LBA III period, exemplified in ceramic production. Mycenaean-style objects seem to have been transported from the coastal areas through major river valleys as finds from Panaztepe in the Hermos River valley, Ephesus, Halkapınar, and Bademgediği Tepe in the Kayster River valley, as well as Çine Tepecik in a valley of a southern tributary of the Meander River demonstrate. Cemeteries with chamber tombs and Mycenaean-style vessels were found on or in the vicinity of the Halikarnassos peninsula at Müsgebi and Pilavtepe, as well as close to Miletus (Değirmentepe) and at Colophon.

While I do not wish to argue that human migration was the principal driving force for the dissemination of Minoan and Mycenaean cultural elements in southwest Anatolia (especially in ceramic terms),<sup>10</sup> I would like to emphasize that geographical closeness and long-standing intercultural ties articulated through exchange of goods, visibly intensified in EBA II,<sup>11</sup> were the key preconditions to more permanent kinds of mobility within the region – ongoing information flow and familiarity kept the door open for segments of population to move from one place to another. Mobility was characteristic of the prehistoric Aegean, where tradesmen, seamen, artisans, and other travellers established connections between geographically distinct areas. Movement within this context could be characterized by supra-local yet relatively short-range mobility; even though people moved beyond their immediate surroundings, most of the movement was contained within a familiar sphere. Therefore, we can hypothesize that in the LBA mobile groups were willing to adopt certain behavioural practices of their destination in a relatively short time, due to the sense of familiarity created by previous contact, and, at the same time, the Anatolian communities were willing to accept what the travellers had to offer, be it, for example, portable objects, raw materials, or technological skills.

### Minoans in Anatolia?

Minoan and Minoanising ceramics are concentrated in the areas near the Aegean Sea and are virtually absent further inland, suggesting that Aegean pottery was primarily disseminated by maritime links from the MM III period onward. At Iasos and Miletus the first evidence for contact dates to as early as, if not earlier than, MM IIB.<sup>12</sup> There is, however, no substantial evidence that southwest Anatolian settlements were involved in direct trade with Crete. In

most settlements commodities made in less distant regions predominate (as noted by Momigliano 2009).<sup>13</sup> At Çeşme-Bağlararası, for example, the majority of the Minoanising imports dating to the MM III-LM IA periods seem to have come from the Cyclades and southeast Aegean, rather than directly from Crete (Şahoğlu 2007, 317–318). It seems, therefore, that Anatolian coastal settlements constituted individual nodes in regional trade networks that were linked to the main arteries of the Aegean exchange networks. Smaller sites were engaged in the regional networks that centred on a major hub – such as Miletus, the Serraglio on Kos, and Trianda on Rhodes – which in turn participated in a wider web of interaction. These smaller and larger networks were interconnected and they were maintained by people of different origins for a variety of purposes beyond trade.

The pattern of distribution of Minoan-style pottery demonstrates that the coast of southwest Anatolia lay outside the main corridor of exchange linking the string of the islands northeast of Crete, among which Karpathos, Rhodes and Kos figure most prominently (Niemeier 2005b; Momigliano 2009; Georgakopoulos 2012, 140ff). Most significantly, the inhabitants of southwest Anatolia do not seem to have been selective about the provenance of such vessels; Koan Light-on-Dark and the locally produced Minoanising pottery produced at Miletus were equally popular. This pattern underlines the importance of Anatolian workshops that produced painted pottery, and at the same time highlights that much of this pottery cannot be sourced with precision. Regrettably, a more precise understanding of this interaction is hindered by lack of evidence for kilns and local pottery production at centres other than Miletus and Limantepe (Niemeier 2005a; Mangalıoglu-Votruba 2015).

As one of the sites studied with the purpose of elucidating Aegeo-Anatolian links, Iasos provides a key to our understanding of the combination of Aegean and Anatolian practices. Although it was originally characterized as a Minoan trading centre (Levi 1962), the recent investigations have shown that the extent of foreign influence has been exaggerated (Momigliano 2005; 2009; 2012). Only up to three imports were brought to Iasos from Crete during the Protopalatial period; the Neopalatial era witnesses a surge in Minoan imports of heterogeneous origins (from Mesara, north-central and southern Crete). Overall, however, only about 5% of the sherds can be identified as belonging to Minoan or Minoanising vessels (Momigliano 2005, 219–222; 2012, 41ff). The largest group of these imports comprises Minoanising ceramics of Milesian origins, but Cycladic pottery as well as the Koan Dark-on-Light and Light-on-Dark were likewise popular. In addition, local potters emulated foreign pottery styles and shapes in the production of conical cups and a small number of closed vessels. These Minoanising objects, such as conical cups, were used in a local setting in which Anatolian building traditions and pottery production remained dominant.

Furthermore, not all of the Minoanised pottery seems to have been made according to recognized Minoan manufacturing techniques. While most of the pottery emulating Minoan form or decoration uses traditional Anatolian techniques of vessel making, it seems that the conical cups were the only class consciously made to look more ‘Minoan’ by implementing Minoan techniques and motor habits. Most conical cups were made of local clay, their paste and slip differed from those used on Anatolian-type pots, and their manufacture combined coiling and fast wheel (Momigliano 2005, 223; 2009, 133). Momigliano is hesitant, however, to attribute these features to the presence of Minoan ‘colonists’ at the site, even when loom-weights, cooking pots, scuttles, and spit-rests of Minoan type were also imitated locally. She has also questioned the integrity of what other scholars have called ‘Minoan kitchen’ assemblages, since not all these objects would have been used together and many of them have predecessors in Anatolia (2009, 132–133; 2012, 153ff).<sup>14</sup>

When we take a closer look at the Anatolian architectural configuration of the domestic environment, several interesting patterns appear, most prominently the selective incorporation of some Minoan architectural features in a predominantly Anatolian context (Niemeier 2005a; 2009; Macdonald *et al.* 2009; Georgakopoulos 2012). For example, in Teichoussa, one of the settlements that yielded a wide range of objects of Minoan-style, the architecture seems to be generally of a broader Mediterranean rather than specifically Cretan, Thera, or even southwest Anatolian style (Voigtländer 2004, 267–272; 2009, 117–118). Building F at Iasos seems to have been a special purpose building employing some features of Minoan design and technology, such as triangular wedge-shaped stones and an almost square plan (Momigliano 2009, 126; 2012, 156). The meagre evidence from the site and our relatively poor knowledge of Anatolian building techniques make it difficult to reach a definite conclusion about the ancestry of this building – a similar technique was employed in building construction in Level III (MM IB-IIIB) at Miletus, which is not considered to be Minoanised (Raymond 2009).<sup>15</sup>

Even though the nature of the contact between Crete and southwest Anatolia seems to be more tenuous than previously suggested (*i.e.*, by the colonisation paradigm), the limited evidence shows a willingness on behalf of the Anatolian communities to incorporate new forms, perhaps through the agency of their neighbours, the inhabitants of east Aegean islands (*e.g.*, Kos, Rhodes, Karpathos) who were in more frequent contact with Crete. Although this specific avenue of contact ceased in LM IB, it can be argued that the strengthening of trade and exchange between the southern Aegean and southwest Anatolia continued and communication as expressed through material transfers never disappeared. In this way, contact with Crete and other Aegean islands may have stimulated the creation of more

stable interregional connections and knowledge networks linking the south Aegean with the Dodecanese and southwest Anatolia through trade connections and perhaps even some small-scale relocation of people.

### Mycenaeans in Anatolia?

Although there is a short chronological hiatus in terms of material exchange with the Aegean between the disappearance of the Minoan vessels and the appearance of the first Mycenaean objects in southwest Anatolia during LH II, it can be argued that the already established networks for the transfer of materials and knowledge were temporarily realigned, rather than altogether lost, during the 16th century BC. In comparison to the preceding period, Mycenaean and Mycenaeanising elements in southwest Anatolia were more prominent than earlier Minoan ones, but their increase was gradual. The earliest Mycenaean and Mycenaeanising pottery has been found at a small number of settlements that had all previously yielded Minoan pottery, including Miletus and Limantepe. LH IIIB-C (13th through first half of the 12th century) sherds tend to be found in settlements inland (Mee 1998, 137–138). Thus a pattern similar to that of earlier periods emerges in which non-local cultural elements appear first at a restricted number of places along the Aegean littoral (see Niemeier 2005a; 2005b; Raymond 2007 for the MBA; Mee 1978; 1998; Gates 1995; Mountjoy 1998; Benzi 2013 for the LBA). The influence of these centres seems, however, to have been highly localized, as suggested by the results of H. Lohmann's survey of the hinterland of Miletus, where the cultural markers outside of Miletus were completely Anatolian (Lohmann 2005).

The LBA III period is characterized by a greater range of foreign elements in the region – now including mortuary architecture – but the Mycenaean and Mycenaeanising assemblages were not as common as is often assumed, and most of them are limited to pottery. Even though more settlements in western Anatolia now started using the Mycenaean-style pottery, there is a discernibly higher amount of such goods in the southwest, as observed by P. Mountjoy (1998). The area around and south of Miletus seems to have engaged more actively in a multidirectional cultural exchange with the Aegean. For instance, at Iasos, the ceramic assemblage is quite diverse. M. Benzi has noted that while some Mycenaeanising pottery was imported, the vast majority of it seems to have been made in a local fabric (including shapes such as kraters, kylikes, and deep bowls) and employed wavy line decoration, which Mountjoy considers a continuation of the LB I east Aegean Light-on-Dark pottery tradition (Benzi 1987, 29; 2005, 206; Mountjoy 1998, 39; Benzi and Graziadio 2013). Based on these data, it can be argued that Iasos maintained strong links with the Dodecanese throughout the LBA III period.

Generally, the circulation of imported painted wares reached its peak in the LH IIIB2, with the exception of Ephesus, where Mycenaean imports were at their height during the LH IIIA2 period (Mee 1978; 1998; Kelder 2004–2005; Niemeier 2005b).<sup>16</sup> At sites further inland, such as at Çine-Tepécik, the sherds tend to date to the very end of LH IIIB2 and during LH IIIC (Günel 2010a; 2010b).<sup>17</sup> Around 800 Mycenaean sherds found at Bademgediği Tepe represent the largest assemblage in western Anatolia (Meriç and Mountjoy 2001; 2002; Meriç 2003; 2007). These sherds were produced locally (*i.e.*, somewhere in southwest Anatolia) and consisted of a wide range of drinking and pouring containers (Meriç and Mountjoy 2002, 84ff). Overall, however, they comprise only a small percentage of the assemblage from Level I and II and were found together with local wares, such as the grey, orange-brown, red, and gold wash wares.

While it has been noted above that changes in mortuary behaviour, which provides an active arena for social competition, might not always be indicative of the origins of the people buried, it is nevertheless important to address them here. Changes in burial practices in the LH IIIB period have traditionally been considered a key piece of evidence for Mycenaean involvement in southwest Anatolia. However, the Anatolian mortuary record shows a broad spectrum of different practices and preferences, since all of the cemeteries that exhibit elements of Mycenaean material culture also maintained local customs to varying degrees – southwest Anatolian communities adopted specific features of Aegean practices, but they mixed and matched them in an innovative manner. For instance, even though the precise architectural form of a tomb of LH IIIA2 date from the Ayasoluk hill at Ephesus cannot be precisely determined, it is certain it contained human bones in a krater, while in typical Mycenaean burials the bones were laid in pits cut into the floor of a tomb chamber or dromos (Gültekin and Baran 1964; Mee 1978, 127; 1998, 139). In his re-examination of the evidence for LBA occupation at Ephesus, Kelder argues that the incorporation of Mycenaean pouring and drinking vessels into an Anatolian funerary ceramic repertoire might have been driven by the local elites (Kelder 2004–2005, 69). This argument seems to fit well with the Anatolian roots of the site; the MBA levels at Ayasoluk contained only local material elements, and the architectural characteristics of the LBA fortification of the hill seem to be of local style (Büyükkolancı 2000). Furthermore, even though some Mycenaean pottery of LH IIIA2 date was found at Halkapınar, a village in the vicinity of Ayasoluk, the pithos burial found within the bounds of the modern village follows the local tradition and thus attests continuity of practice (Horejs 2008).

The presence of chamber tombs has received much attention. While the earliest Mycenaean tombs in Rhodes appear in LH IIIA1, on the Anatolian mainland they appear

only during the LH IIIB-C periods (Girella 2005). Both chamber tombs and tholoi have been found in Anatolia, yet there are some deviations with respect to the construction of the tholos reported at Colophon, as has been observed by both Bridges (1974) and Mee (1978). The Mycenaean chamber tomb cemetery at Değirmençtepe of LH IIIB-C date, located only 1.5 km southwest of Miletus, included goods of Anatolian as well as Mycenaean extraction – three of the swords were of Anatolian/Hittite type, while only one was Aegean. The tombs' construction, on the other hand, adhered to Mycenaean building standards (Mee 1998, 139; Mountjoy 1998, 37). A wealthy chamber tomb containing a rich assemblage of Mycenaean and Anatolian objects has recently been discovered at Pilavtepe, at an ancient crossroads between Iasos and Milas (Benter 2009).

Southwest Anatolian cemeteries are in fact remarkably heterogeneous. For example, the LBA burial grounds at Panaztepe contained chamber tombs and tholoi, in addition to pithos, jar, box, and urn burials, as well as cist graves (Erkanal-Öktü 2008, 73; tholos burials and cists belong to the later Phase II). Most of the small tholoi had oval chambers of differing proportions, and all of them contained either contracted inhumations or cremations in jars, while the grave offerings were of mixed Anatolian-Aegean ancestry and included Mycenaean jewellery (Günel 1999, 171; Erkanal-Öktü 2008, 74). Mee considered them as representative of a broader local development rather than as evidence of a direct Mycenaean presence (1998, 140). The pottery from the cemetery and the site also shows that the local pottery production of Mycenaeanising wares was creative and did not strictly imitate mainland prototypes (Mountjoy 1998; Günel 1999; see Girella and Pavuk this volume). A group of weapons and Mycenaean pottery without precise context that was acquired by the Manisa Museum was identified as coming from the cemetery at the site; this collection also exhibits a marked heterogeneity in terms of the objects' ancestries and styles (Ersoy 1988).

The cemetery at Müsgebi has attracted much archaeological attention and deserves a longer comment here. Forty-four chamber tombs were used primarily for inhumations, although three graves had remains of cremations, and the site was considered a prime example of a Mycenaean enclave (Boysal 1967; Mee 1998, 138). The tombs contained a variety of Mycenaean vessels mostly of LH IIIA2 and LH IIIB date, although a small number of tombs also produced vases from LH IIIC, and local shapes were few in number (Carstens 2008, 59–64 and 68; Mountjoy 1998, 36 and 53). Other objects included Mycenaean-type jewellery and bronzes, the most popular of which were spearheads, cleavers, and knives. Despite the large amount of Mycenaean objects in the cemetery, a recent restudy of the material has suggested that the tomb assemblages at Müsgebi should not be conceived of as typically 'Mycenaean', as defined in Greek mainland terms, but rather as exhibiting a combination of different

cultural influences. The use of chamber tombs and stirrup jars, for example, is a feature typical of Greek mainland burial practices, while large piriform jars constitute a rarity on the Greek mainland and are much more common in chamber tombs on Rhodes (Eerbeek 2012). A possible local trait is represented by the popularity of the straight-sided alabastron at Müsgebi. This vessel form, while comparatively uncommon in graves on Rhodes and the Greek mainland, occurs relatively frequently in tombs of local type in the area to the north of the island of Samos.<sup>18</sup> By combining different cultural elements, the people burying their dead at Müsgebi constructed their own cultural identity through the expression of (various degrees of) connectivity with the different regions, primarily those immediately adjacent to Caria. Ultimately, the construction of such tombs may not have been a direct indication of the Mycenaean presence as they are rare in the Cyclades where Mycenaean influence is more pronounced, and the paraphernalia associated with the Mycenaean tomb types is of mixed origins.

In addition to funerary data, the arguments in favour of Mycenaean presence in southwest Anatolia have been constructed upon the evidence of small objects, such as pottery, jewellery, or cultic equipment. If we look beyond these, however, it is difficult to find other indications for a substantial presence of Mycenaean settlers. So far, no Mycenaean administrative centres have been identified in the region, although perhaps Linear B may have been known to the inhabitants of Miletus (Niemeier 2005a, 11). On the other hand, all LBA architectural features in the region fit well with the Anatolian tradition.

Perhaps, the Hittite sources provide some indication of the shifting extent and nature of the political control in western Anatolia during the 14th century BC. The Arzawan polities maintained commercial and political contact with the Aegean and the Ahhiyawa during that period despite Hittite concerns (Hawkins 1998; Mountjoy 1998; Bryce 2011), and it is important to keep in mind that the political configuration of the region during the 14th and 13th centuries would have been further affected by the collapse of the Hittite empire in the beginning of the LH IIIC period. The end of Hittite political involvement, which previously might have regulated the flow of commodities to its western frontier, might have opened up some new avenues for the acquisition and circulation of Mycenaean and Mycenaeanising goods that were found further inland during the 12th century BC. The increased production of Anatolian painted Mycenaeanising pottery and the numerous and interesting local variations from Panaztepe and Bademgediği Tepe attest this shift (Günel 1999; Meric and Mountjoy 2002). The change of political configuration must have had some influence on people as well, and may have indirectly encouraged some more permanent kinds of small scale movement of people by way of new opportunities for trading, craft production, and other motives.

## Conclusion

The anchor of the argument in favour of a strong Minoan and Mycenaean cultural influence (even accompanied by permanent settling of peoples) in Anatolia has been the presence of Aegean and ‘Aegeanising’ pottery, the quantity of which has often been thought to reflect the degree of cultural change that transpired. Pottery, however, may have traditionally been given a disproportionate interpretative weight. While it cannot be disputed that ceramics (and their content) were widely traded and are therefore an important medium for tracing connections archaeologically, their presence should not be taken as a proxy for settling of people. The formal range and quantity of these items may be misleading, since they may merely reflect the degree of a site’s integration into prevailing trade networks as opposed to being an indication of a deeper cultural change. Miletus is a good example of this phenomenon, since during most of its history the high concentration of foreign elements, as argued by Raymond *et al.* in this volume, was primarily reflective of its ties with the rest of the Aegean as well as the special nature of excavated deposits. In this respect, a particularly diagnostic aspect of the distribution of foreign and local ceramic styles is that both Minoanising and Mycenaeanising vessels do not seem to have been spatially separated from the local wares. Although there is much intersite variation in terms of material culture, the local pottery was continuously used alongside both imported vessels and ‘Aegeanising’ imitations of these imports (Raymond *et al.* this volume; for syntheses, see Kedler 2004–2005, 64; Niemeier 2005b; Momigliano 2012, 159ff).

In addition, one of the misconceptions in current approaches is the dominant view that the painted Aegean pottery can belong only to Mycenaean inhabitants of Mainland Greece or the Minoans of Crete. This is especially problematic with respect to the Mycenaean-style pottery, which was widely produced and used at sites for over two centuries. New research has indicated that the majority of the vessels found in southwest Anatolia do not seem to be imported from afar; rather, it seems that Miletus as well as more distant Rhodes provided most of the Mycenaean-style pottery as early as LH IIIA (Gödecken 1988; Benzi 2013). More generally, throughout the east Mediterranean locally produced imitations of Mycenaean pottery largely replaced mainland Greek imports during LH IIIC (Sherratt 2013, 638–639).

While models that draw on various aspects of the concept of cultural mixing take into account the heterogeneous nature of cultural phenomena, their limitation is the lack of emphasis on human mobility as an agent of cultural transmission. On the other hand, past migrations have often been studied within a nation-state paradigm, in which emphasis has been given to concepts such as distinct

national boundaries, and ethnic identities (Hoerder 2011, 269). Sharp inter-group distinctions, however, might not be representative of the LBA social milieu. As suggested above, groups residing in the east Aegean and southwest Anatolia were integrated into the same interaction sphere, and even though they may have assumed distinct identities, it can be argued that the cultural distance between them was not as pronounced as often thought. While transfer of items and ideas can happen without the permanent resettlement of people, it is not too far-fetched to imagine that interregional trade connections were complemented by repeated settling of various population groups. The coastal zone was conducive to mobility, and islands close to the Anatolian shores served as bridges to the wider Aegean, enabling both short-term movement – for instance, for trade purposes, seasonal work – and long term relocation – for marriage and long-term employment, among others.

In this contribution it was argued that prehistoric southwest Anatolia was shaped by different types of mobility that occurred within a large sphere of interaction encompassing familiar places and people, and a shared knowledge base. Mobility of both people and objects did not act as a trigger for cultural change; rather it facilitated the maintenance of regional cultural continuity in southwest Anatolia. People did not exist in isolation, and the mixed nature of the material assemblage is indicative of an especially high degree of connectivity during the LBA within the east Aegean-southwest Anatolian region. The incorporation of this area into the larger Mediterranean world in the 2nd millennium BC set the stage for continuous multidirectional movements of peoples not only within the Aegean sphere, but also to Anatolia and beyond, a process which may have become temporarily severed and then resumed again. As such, the meeting of people and mixing of material culture was a natural outcome of increased mobility in the Aegean itself that happened a few centuries after the introduction of sailing technologies at the dawn of the EBA, which also entailed a revolution in attitudes toward seafaring and the distance one could traverse, making the eastern Mediterranean a smaller place. However, while the role of the Aegean groups in the cultural mixing has been the focus of investigations for some time now, the role of their Anatolian counterparts has received less attention and emphasis.<sup>19</sup>

Most importantly, many of the modern archaeological concepts under present review operate along the modern national divide, and perhaps exaggerate the gap between the Aegean and Anatolian societies. After all, the Aegean and Anatolian littoral shared a remarkable cultural closeness, prompted by interaction, exchange, and other forms of social contact, that continued well beyond prehistory.

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## Notes

- 1 *E.g.*, at Pergamon, Miletus, and Ephesus. These links stemmed from the view that coastal Anatolia was an integral part of the Classical world. The first investigations in this area were undertaken with the aim to explore the monuments and occupation of the Classical period, thus explicitly tying the cultural history of Anatolia to that of Classical Greece. The excavations of prehistoric Miletus in the 1990s under the directorship of W.-D. Niemeier changed the way we understand the relationship between the Anatolian littoral and the Aegean before the Classical era (Niemeier 1999; 2005a; 2005b; 2009). Recently, a new wave of projects was launched to reexamine systematically the relationship with the Aegean in the earlier periods, such as at Limantepe (Erkanal 2008; Mangaloğlu-Votruba 2011), Çeşme-Bağlararası (Şahoglu 2007), Iasos (Momigliano 2012), and Tavşan Adası (Bertemes 2009).
- 2 A similar critique was expressed by Sherratt concerning the Mycenaean ‘colonisation’ of Cyprus (1992). Furthermore, Killian’s argument was predicated upon a model of centralized Mycenaean economy; recent years witnessed a wave of reconsideration of our views of Mycenaean material culture, cultural affiliation (*e.g.*, Feuer 2011), and Mycenaean political and economic configuration in general (*e.g.*, Pullen 2010).
- 3 The only exception is the site of Kastrí on Kythera, where Minoan architectural trends appeared very early, beginning in EM II and continuing throughout the Neopalatial period, and where all classes of material culture show uncommonly strong Minoan influence (Broodbank 2004, 73ff; Broodbank and Kiriatzi 2007; Davis and Gorogianni 2008, 343).
- 4 In our discipline, we still tend to operate under the problematic culture-historical assumption that a group of artefacts creates assemblages characteristic of an archaeological culture, which then is considered a material representation of a bounded group of people sharing identity and linguistic affiliation (Roberts and Vander Linden 2011).
- 5 Anthony (1990, 901–905) distinguished a few basic types of migrations. Short distance migrations occur within a local area and tend to be related to kin strategies, such as marriage, while long distance movements require much more planning and access to information about distant places. Long-distance migrations tend to occur along well established routes, and thus proceed in streams or through ‘leapfrogging’ (large areas may be bypassed in order to get to desired destinations; see also Yasur-Landau 2010 for a discussion on the possibility of long-distance large-scale immigration into the Levant). Additionally, return migrations occur commonly, too, since people may choose to come back home.
- 6 *E.g.*, the discussion surrounding the ‘warrior graves’ on Rhodes from Ialyssos (Mee 1982; Girella 2005).
- 7 *E.g.*, see Bryce’s discussion on the resettlement of people in western Anatolia during the mid-13th century (Bryce 2002, 259) and the evidence from the Uluburun shipwreck (Pulak 1998).
- 8 For instance, the A-tablet series from Pylos mentions women from Knidos (Aa 792, Ab 189, Ad 683) and Zephyros (Halicarnassos) (Ad 664) that were assigned to certain tasks (such as weaving) and received rations from the palace (Ergin 2007, 270–271).
- 9 By ‘elements’ I mean any object that either comes – or seems to imitate objects – from Crete or the Greek mainland either in form or decoration, or is made of materials from Crete or the Greek mainland, or is made by imitating their methods of manufacture.
- 10 By Minoanising and Mycenaeanising pottery I mean vessels, the form and decoration of which were fashioned according to Cretan and Mainland Greek standards respectively, but were made outside of these areas.
- 11 The Aegean and western Anatolia exhibited elements of cultural closeness since at least the EBA II sharing some common material expressions, such as the popularity of tankards and depas cups (Broodbank 2000; Şahoglu 2005; Kouka 2009).
- 12 The accessibility of coastline has dramatically changed since antiquity. While Miletus could be accessed only through a lengthy route along the southern tributaries of the Meander River (as Mount Latmos presents a formidable obstacle), settlements to the north of the river could have been accessed in a more direct way (Thompson 2007). Iasos (Momigliano 2009; 2012), Teichoussa (Voigtländer 2004; 2009), Tavşan Adası (Bertemes 2009) were all sea-focused communities that occupied strategic positions in the network of maritime routes.
- 13 This situation was modelled by Knappett (2011) as ‘small world networks’. For the role of Iasos within them see Momigliano 2009. See also Sherratt and Sherratt 1998.
- 14 These discoid loomweights might have precedents in those belonging to the EBA from Çeşme-Bağlararası. Fire-spits were found in EBA Aphrodisias (Momigliano 2009, 132–133; 2012, 161).
- 15 Momigliano continues to describe the channel kiln from Miletus III that was used for the production of Anatolian/east Aegean Red Slipped wares. This type of kilns has long been considered Minoan, but it seems to have appeared on Crete only later, during the Neopalatial era (2012, 159). Thus, this might be yet another indicator that not everything that we consider Minoan did indeed originate on Crete.
- 16 Due to the small number of petrographic studies published to date (but see Momigliano 2012), the general identifier ‘Mycenaean imports’ designates that they were most probably made outside of Anatolia.

- 17 The Mycenaean finds have come to light from a number of inland sites in the Gediz (Hermos) and Büyük Menderes (Meander) River valleys. Some sites yielded isolated finds, such as Beycesultan, Duver, Sardis, Gavur Tepe, and Dereköy (Mee 1998, 141), while a pithos burial containing Mycenaean vessels has been found at Çerkes Sultanıye (Hanfmann and Waldbaum 1968). The Sardis sherds were dated to LH IIIB-C Middle period based on stylistic parallels, and seem to have come from a local workshop (Spier 1983, 22–23; Mellink 1991, 138; Kelder 2004–2005, 60).
- 18 I thank Jacob Eerbeek for this observation.
- 19 A concern raised also by J. Rutter while examining the imports at Kommos (e.g., 2006, 148–150).

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## DISCERNING ACCULTURATION AT MILETUS: MINOANISATION AND MYCENAEANISATION

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A diachronic study is essential at Miletus: the archaeological strata documented by W.-D. and B. Niemeier in the area south of the Athena Temple extend from the Anatolian Late Chalcolithic to the Late Bronze Age, and the core of these strata – the MBA Miletus Period III to the LBA Miletus Periods IV and V – exhibits a continuous series of local features with varying degrees of Aegean cultural influence (Niemeier and Niemeier 1997; 1999; 2000; Niemeier 1986; 1995; 1996; 1997; 1998a; 1998b; 1998/99; 1999a; 1999b; 1999c; 2000; 2002a; 2002b; 2002/2003; 2004; 2005a; 2005b; 2007; 2009). These local features, including architectural installations, industrial tools, and the production and consumption of pottery, are intertwined with site-pervasive evidence of Minoanisation (Miletus IIIa/Proto-Palatial; Miletus IIIb, IVa, and IVb/Neo-Palatial) and Mycenaeanisation (Miletus V/LH IIIA1–2).<sup>1</sup> Periods Miletus III to V likewise coincide with Cretan (Knossian and Mesaran) and Peloponnesian imports. A significant shift occurs in Miletus VI (LH IIIB) and continues into Miletus VII (LH IIIC), when Anatolian material is eclipsed by Mycenaean imports and Mycenaeanising wares.

This article explores how indigenous, Anatolian, Minoanising, and Mycenaeanising traits are manifested at the site, and how features from the Aegean core zones gain momentum over time, even though indigenous features in Miletus III, IV, and V are regularly mixed into the body of material and *cannot be separated* in terms of spatial or behavioural context. This intriguing and inescapable result of work at Miletus necessitates the consideration of broader contacts in a variety of social situations, and recognizing the processes of acculturation at Bronze Age Miletus captures this nuance of the excavated remains.

Evidence of acculturation, in the traditional, anthropological sense, refers to the resultant phenomena when groups of individuals from distinct cultures come into continuous contact, “with subsequent changes in the original cultural patterns of either or both groups” (Redfield *et al.* 1936, 149). Acculturation may occur as the more specific process of cultural assimilation, in which one group is ultimately absorbed by a dominant or host group with the replacement of cultural traits. If a cultural assimilation might best describe the Mycenaeanising period of Miletus VI–VII, the material evidence of Miletus III–V however does not speak so clearly in black and white. A close assessment of the Minoanising phases of Miletus III and IV and the Mycenaeanising phase of Miletus V does not show assimilation but instead reveals a two-way process of acculturation that includes hybrid cultural characteristics. In general, evidence of the acculturation process in Miletus III and Miletus IV involves changes in the patterns of ‘both groups’ and in this way has much in common with the acculturation process in Miletus V. The Mycenaeanisation process in Miletus VI to Miletus VII presents itself in a starkly different manner.

The new excavation of Bronze Age strata at Miletus therefore offers an occasion to test such notions, as they have accumulated over decennia of exchanges between cultural anthropology and archaeology, like acculturation, assimilation, hybridization, against the material itself.

### The Phases

The Cretan and western Aegean influence at the site occurred in three waves: a Minoanising Phase in Miletus III–IV, a

First Mycenaeanising Phase in Miletus V, and a Second Mycenaeanising Phase in Miletus VI–VIII. Tables 4.1–4.5 present the acculturation processes in schematic form according to the stratigraphy observed at Miletus. As stated above, the Minoanising Phase and First Mycenaeanising Phase exhibit similar characteristics of acculturation and correspond to the specific Aegean periods listed in Table 4.1. The Second Mycenaeanising Phase, which corresponds to the Aegean LH IIIB–IIIC period, shows a much more pervasive presence of Mycenaean-type material, if not a complete assimilation.

The Minoanising Phase and First Mycenaeanising Phase present gradations of acculturation, covering seven archaeological strata (Miletus IIIa–b, IVa–b, and Va–c) (Kaiser 2005; 2009a; 2009b; Kaiser and Raymond 2015; Kaiser and Zurbach 2015; Raymond 2001; 2005a; 2005b; 2006; 2007; 2009; Zurbach 2006; 2011). These strata provide an opportunity to evaluate the material amid changing practices of local pottery production, site use, and imports that vary in quantity and source.

The homogeneity of the Second Mycenaeanising Phase in Miletus VI–VIII reflects a fundamental shift in the operation of the site when external, non-Milesian interests appear paramount. Such a shift, when the interests of the locals become ancillary to international events, alters the archaeological record in an obvious manner, and one is tempted to apply more traditional theories of colonization to the site as a whole (see Momigliano 2012, 14–15, for insight on this approach). Instead, the team at Miletus has embarked on a rigorous analysis of the phenomena: the excavated remains must be evaluated with attention to 1) the subtle variations of material culture in the Minoanising Phase and First Mycenaeanising Phase when local interests persevere over centuries, as interregional contacts increase, and 2) the blunt contrast of having a near replacement of tangible goods and site function in the Second Mycenaeanising Phase in the face of the previously efficacious hybrid environment.

### Indigenous Coastal Anatolian

Bronze Age Miletus was situated on the bay where the Maeander River met the Aegean Sea (Fig. 4.1 and Fig. 4.2). Geophysical study documents that the site was located on a small, pre-peninsula islet, and excavations exposed the building phases on its northern shore (Brückner 1995; 1996; 1998; 2003). I. Kaiser has clearly described the topography of the area, the harbours, and the location of the prehistoric site (Kaiser 2009b, 21), and B. Weber has published site plans of the peninsula and islets, following the work of H. Brückner (Weber 2007, especially 341–342, fig. 12).

Miletus is neither purely an inland river valley site, such as Çine-Tepcik and Beycesultan, nor a southeastern Aegean island site, such as Kos and Kalymnos. Comparanda

for Miletus exist from Aphrodisias as well as the Samian Heraion. For this reason, the indigenous culture at Miletus is called ‘coastal Anatolian,’ and other coastal Anatolian sites include Tavşan Adası, Teichoussa/Akbük, and Iasos (Bertemes 2009; 2010; 2013; Voigtländer 1986; 2004; 2009; Momigliano 2000; 2005; 2009; 2012). While there is a need for an ‘inside-out’ as opposed to a ‘continent-first’ geography, delta settlements that are poised where major rivers flow into the sea perhaps fulfil a larger role than that of a *peraia* territory (Knappett and Nikolakopoulou 2015). Moving to the study of the ceramic assemblage, the term indigenous pottery refers to locally made vases in a style and with evidence of ceramic technology that reflects the ceramic traditions of contemporary, regional settlements. Indigenous pottery often displays a continuation of the ceramic industry of the preceding period at the site. The indigenous material assemblage at Miletus partakes of the traditions of inland Anatolia as well as presents traits that are coastal. The label “indigenous coastal Anatolian pottery” that is used in Table 4.2 and Table 4.3 is more specific than the label “local pottery”. Miletus is, most appropriately, a “coastal Anatolian” site that may have been a pivot point for the settlements along the river valleys and those scattered along the coast and islands.

### Architectural and Stratigraphic Concerns

Miletus was inhabited in the Anatolian Late Chalcolithic period, which roughly coincides with the Aegean Final Neolithic period. Though evidence of site function in LC Miletus I and EBA Miletus II is scanty, the indigenous pottery assemblage is sizeable, occurring in the Niemeier excavations south of the Athena Temple as well as near the Heroon and west of the Bouleuterion at Miletus (Parzinger 1989; Voigtländer 1982; Kouka forthcoming). Some specialized Anatolian and Cycladic imports have been discussed and published elsewhere, such as seven marble and stone figurines of Western Anatolian types, as well as the EC II head of a Cycladic idol of the Dokathismata variety (Niemeier 2005a, 2, Col. Pl. 3).

Site function in the MBA and LBA is complex (Table 4.1). The EBA Miletus II ceramics are precursors to the MBA Miletus III assemblage, and documented indigenous ceramic traits reflect a continuity of taste and technology from Miletus III through Miletus IV and Miletus V. During the Minoanising Phase, the buildings excavated at the Athena temple site did not constitute a domestic settlement, but a centre of ceramic production and ritual activity, with an abundance of Aegean imports. An interplay of kiln use and ritual-feasting activities within rectangular spaces occurred in Miletus III and IVa until the Thera eruption. North-south terracing walls are securely dated to MBA Miletus IIIa, though other Miletus IIIa structures were likely

Table 4.1. Architectural and Stratigraphic Features at Miletus by Period

Miletus Periods	Corresponding Aegean period		Prominent architectural features	Stratigraphic features
IIIa	Minoanising, early	MM IB–IIB	North-south terracing walls	
IIIb	Minoanising, moderate	MM III/LM IA	Altars in sanctuary complex; sherd hearth; channel kiln	Levelling for IIIB structures
IVa	Minoanising, extensive	LM IA	Altars in sanctuary complex; probable channel kiln	With destruction level
IVb	Minoanising, extensive	LM IB–II/LH IIA–B	Two large rectangular buildings (roughly 7 × 11m and 8 × 12m) on northwards sloping terrain	With destruction level
Va–c	Mycenaeanising, First Phase	LH IIIA 1–2	Pottery kilns of the large channel type (Miletus Vc)	
VI	Mycenaeanising, Second Phase	LH IIIB	Corridor House of the mainland type; Mycenaean-type necropolis at Değirmençepe; Construction of fortification wall (with Hittite and Cypriote parallels)	With late (LH III B2) destruction level
VII	Mycenaeanising, Second Phase	LH IIIC early	Destruction of fortification wall	Destruction deposit

Table 4.2. Indigenous Pottery at Miletus by Period

Miletus Periods	Corresponding Aegean period		Indigenous coastal Anatolian decorated pottery	Indigenous coastal Anatolian undecorated small and medium pottery shapes
IIIa	Minoanising, early	MM IB–IIB	Red slip; Beige slip; Red painted ware	Indigenous coastal Anatolian shapes and Minoanising shapes
IIIb	Minoanising, moderate	MM III/LM IA	Red slip; Beige slip; Red painted ware; Red wash	Indigenous coastal Anatolian shapes and an increase in Minoanising shapes, including grill stands
IVa	Minoanising, extensive	LM IA	Red wash	Indigenous coastal Anatolian shapes and more Minoanising shapes, including piriform and conical rhyta, askoi, fire-boxes, grill stands
IVb	Minoanising, extensive	LM IB–II/LH IIA–B	Red wash	Minoanising shapes, continuing those of Miletus IVa
Va–c	Mycenaeanising, First Phase	LH IIIA 1–2	Red wash only on table ware; Class X appears (hybrid kraters and bowls)	Minoanising shapes, continuing those of Miletus IV
VI	Mycenaeanising, Second Phase	LH IIIB	Red wash disappears; Class X apparently decreases	Mycenaeanising types in a new brownish ware, fine and semi-fine vases; table wares such as the shallow angular bowl replace Minoanising shapes
VII	Mycenaeanising, Second Phase	LH IIIC early		Mycenaeanising types

levelled for the Miletus IIIb stone structure with hearth, a channel kiln, and a series of altar basins and platforms. Miletus IVa activities brought increased wealth and site use that necessitated more altar platforms and established a sanctuary complex and sprawling rectangular structures. Thus the ritual area had multiple phases of use from Miletus IIIb to IVa, with six altar platforms, 15 stationary plaster offering tables, overturned drinking cups, rhyta, and deposits of ash with butchered animal bones (Niemeier 2005a, 6–7; 2007, 11–12; Kaiser and Raymond 2015, 149). Perhaps enhanced Aegean interest in commerce up and down the

Maeander River brought the influx of Minoan and central Aegean precious objects, use of Minoan writing, and Minoan animal husbandry (as found in Table 4.3 and Table 4.5). This apparent affluence may have likewise sparked the Miletus IVa interest in Minoanising fresco painting, even though wall construction in Miletus III and IV was “relatively humble” (Niemeier 2005a, 8), with rubble-filled interior and exterior wall faces and no evidence of ashlar masonry. Discoid loom-weights and spindle whorls occur in Miletus IIIa–IVa as noted in Table 4.5, but the material is not interpreted by Gleba and Cutler as evidence of an

Table 4.3. Indigenous Pottery at Miletus by Period

Miletus Periods	Corresponding Aegean period		Indigenous coastal Anatolian undecorated cooking pots and pithoi	Zooarchaeological results
IIIa	Minoanising, early	MM IB–IIB	Indigenous coastal Anatolian types	Sheep bones more prominent than goat
IIIb	Minoanising, moderate	MM III/LM IA	Indigenous coastal Anatolian and Minoanising types, including tripod cooking pots	
IVa	Minoanising, extensive	LM IA	Minoanising types, including tripod cooking pots, indigenous coastal Anatolian Miletus III cooking pot disappears	Goat bones more prominent than sheep; Muricidae ( <i>Murex</i> snails) more common than Cardiidae (cockle/bivalve)
IVb	Minoanising, extensive	LM IB–II/ LH IIA–B	Minoanising, continuing types of Miletus IVa	Goat bones more prominent than sheep
Va–c	Mycenaeanising, First Phase	LH IIIA 1–2	Mycenaeanising cooking pots; Minoanising pithoi	Increase in sheep bones, now equal with goat; Cardiidae (cockle/bivalve) more common than Muricidae ( <i>Murex</i> snails)
VI	Mycenaeanising, Second Phase	LH IIIB	Mycenaeanising cooking pots and pithoi	
VII	Mycenaeanising, Second Phase	LH IIIC early	Mycenaeanising types	

Table 4.4. Ceramic Imports at Miletus by Period

Miletus Periods	Corresponding Aegean period		Minoan and Mycenaean decorated ceramic imports	Other Aegean ceramic imports
IIIa	Minoanising, early	MM IB–IIB	Cretan (Knossian), Kamares and semi-coarse polychrome	MC imports
IIIb	Minoanising, moderate	MM III/LMIA	Cretan (Knossian and Mesaran), Kamares and semi-coarse polychrome, ripple ware	MC imports, including dark-on-light; few SE Aegean imports (none from Kos)
IVa	Minoanising, extensive	LM IA	LM IA Floral Style, spiral decoration, ripple ware	LC I Theran imports; SE Aegean imports (Kos LoD)
IVb	Minoanising, extensive	LM IB–II/ LH IIA–B	Marine Style (continental LH IIA); LH IIA and LH IIB decorated wares; LM IB Standard Tradition ware	SE Aegean imports (Kos LoD, perhaps Rhodes and Kalymnos)
Va–c	Mycenaeanising, First Phase	LH IIIA 1–2	Mycenaean fine vases (mostly Peloponnese); Very few LM III sherds	SE Aegean imports cease
VI	Mycenaeanising, Second Phase	LH IIIB	Mycenaean, fine and semi-fine vases	
VII	Mycenaeanising, Second Phase	LH IIIC early	Mycenaean	

established industry (Gleba and Cutler 2012; Cutler 2012).

Miletus was re-settled after the Thera eruption (although the nearby site of Tavşan Adası was not), and this Miletus IVb stratum offers the best preserved architecture of the Minoanising Phase. Two large (roughly 7 × 11m and 8 × 12m) rectangular structures each have a major square room unit in the north and a rectangular east-west room in the south. Because of the northward sloping terrain at the site, the southern rooms were on a higher elevation and required the double east-west-walls. These structures were destroyed by an unknown agent, possibly by Mycenaeans. A further

hint in the direction of Mycenaean agents could be given by the evidence emerging from an NAA study of the Miletus IVb Marine Style pottery, pointing to a mainland source (H. Mommsen, personal communication, as noted by Knappett and Nikolakopoulou 2015).

Pottery production expands in the First Mycenaeanising Phase of Miletus V, with the construction of eight kilns (Niemeier 1997). Three channel kilns were excavated in the western area of the site, each with five benches in a 3m wide chamber. These kilns perhaps continue the firing technology used in the channel kilns of Miletus III and IV. Five horseshoe

Table 4.5. Non-Pottery Imports at Miletus by Period

Miletus Periods	Corresponding Aegean period	Minoan and Mycenaean non-pottery imports	Non-pottery Aegeanizing trends
IIIa	Minoanising, early	MM IB–IIB	Minoanising loomweights 98.419.1 98.421.1; Triton shell 98.364.1
IIIb	Minoanising, moderate	MM III/LM IA	Minoanising loomweights 98.225.2 98.100.17; Linear A on local clay (99.658.1, MIL Zb4)
IVa	Minoanising, extensive	LM IA	Minoan sealstones; Minoan stone vases; Minoan marble weight
IVb	Minoanising, extensive	LM IB–II/ LH IIA–B	Minoan sealstones
Va–c	Mycenaeanising, First Phase	LH IIIA 1–2	Mycenaean figurines; Mycenaean seal- stones; Mycenaean-type metal objects (knife)
VI	Mycenaeanising, Second Phase	LH IIIB	Mycenaean figurines; Mycenaean-type metal objects, mould, and Mycenaean fashion gold, faience, and blue-glass jewellery
VII	Mycenaeanising, Second Phase	LH IIIC early	

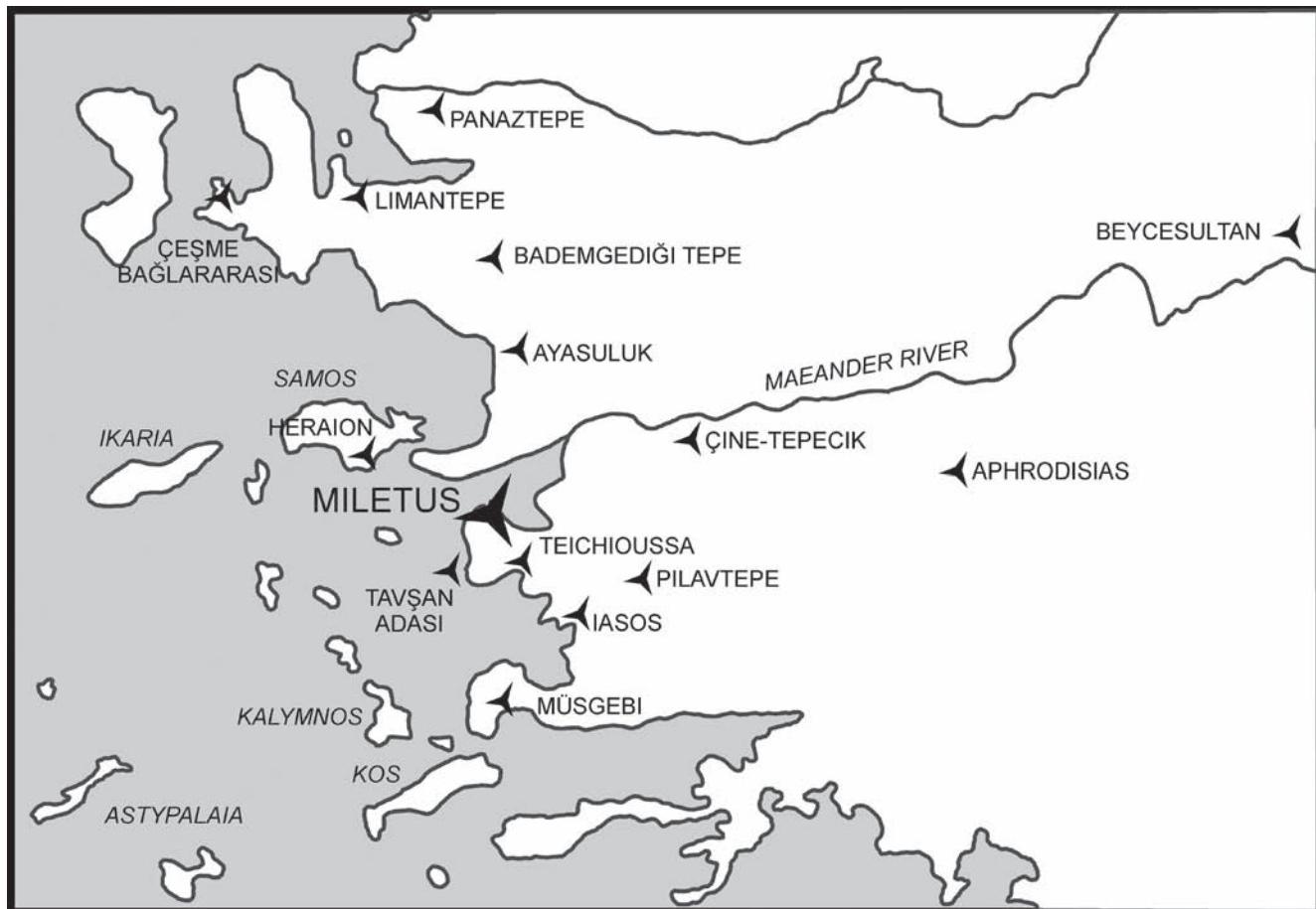


Fig. 4.1 Miletus in Western Anatolia and the Southeastern Aegean (A. Raymond).



Fig. 4.2 The Miletus Region (A. Raymond).

or round kilns were scattered across the Miletus V area. Two of these round kilns were constructed early in Miletus V, and all others were built and used in Miletus Vc. Channel kilns are well known on Late Minoan Crete (such as at Kommos, Shaw 2001), and the distribution of the kilns throughout the remains of rectangular Miletus V structures may echo the family-unit style of production evidenced at the potters' village at Gouves (Vallianou 1997; Gros and Zurbach 2012). Some horseshoe or round kilns are known elsewhere in Anatolia, for example at Kocabıştepe and Baklatepe (Özkan 1999). And it is noteworthy that in Miletus V, imports from Crete and the southeastern Aegean islands significantly decline, and zooarchaeological results demonstrate a clear shift in dietary choice (Table 4.3 and Table 4.4).

Construction during the Second Mycenaeanising Phase seems to dwarf all that precedes it. These inhabitants built the Corridor Houses of the mainland type, buried their dead

in Mycenaean chamber tombs at a necropolis to the south at Değirmençepe, and constructed the well-known fortification wall, preserved in a 5m thick, 45m west-to-east portion with casemates (which has Hittite and Cypriote parallels). This wall was in use for a short time before its destruction in Miletus VII (LH IIIC). Remains of phases V to VII have been found in earlier excavations at different locations between the Athena temple and the northern slopes of the Kalabak Tepe, so the size of the settlement at that time must have been quite important. A detailed study of these data will be included in the final publication.

### Imported Pottery

Whatever the self-perceived identity of the Milesians, they were using imported goods from Crete, the western Aegean,

the Cycladic islands, and the southeastern Aegean islands (Table 4.4). A few sherds may be imports from central or northwestern Anatolia, but they have not been identified with assurance. In Miletus IVa, the imported Aegean fine wares were not supplemental in the assemblage but were the *sole fine wares in use at the site*. In the Minoanising Phase (Miletus III–IV) and the First Mycenaeanising Phase (Miletus V), these imports were consistently intermixed with the indigenous wares and were without a distinct spatial or behavioural context.

Cretan imports in the Miletus IIIa excavated contexts include fragments of Kamares ware semiglobular cups, straight-sided cups, and Knossian semi-coarse polychrome amphorae and jars. Middle Cycladic red micaceous fabric jars also appear in Miletus IIIa (C. Knappett, personal communication). Minoan imports continue in Miletus IIIb and include ripple ware sherds and MM IIB vases from north-central and south-central Crete, such as oval-mouth amphorae and lentoid jars (with one complete lentoid jug now on display in the Miletus Museum) (Raymond 2001, 20–22, figs. 2 and 4; Van de Moortel 2010, 876, 880–882 for a discussion of other lentoid jugs and flasks). In Miletus IVa, Minoan fine decorated wares from various Cretan zones overwhelm the site, such that no indigenous fine wares or pattern-decorated pottery were made. (Red Painted Ware only occurs in Miletus III.) Late Cycladic decorated wares from Thera and East Aegean light-on-dark wares, especially from Kos, were also in these pre-Theran destruction contexts. Nicolas Zenzen is publishing the East Aegean imports at Miletus, and he is working closely with researchers on Kos, especially S. Vitale (in this volume), to understand the distribution of Koan fabrics in the region. At the end of the Minoanising Phase in Miletus IVb, LM IB Standard Traditional wares and Marine Style (from the mainland, as mentioned above) were mixed with other LH IIa and LH IIb imports.

The Milesians of the First Mycenaeanising Phase imported LH IIIA1–2 fine wares mostly from the Peloponnese and few (if any) from Cretan and southeastern Aegean sources. This may also be the case for the Second Mycenaeanising Phase, given that NAA analyses confirm that at least a portion of the Miletus VI imported pottery is from the northeastern Peloponnese, most probably the Argolid (H. Mommsen, personal communication, NAA Bonn 2009, MILE 194, 207, 208, 209, 211, 218). At that time however a good part of the fine decorated pottery in use at the site was locally produced.

## Indigenous Pottery

Now to the heart of the material: the indigenous ceramics and the interpretation of the local and non-local traits by period (Table 4.2 and Table 4.3). First we offer an overview and then a discussion of two specific cases of hybridisation that may or may not be unique to this site.

The indigenous coastal Anatolian ceramics in Miletus IIIa are robust. The majority of the fine wares are red slip burnished bead rim (rolled rim) bowls and carinated cups in a beige fabric. Red slipped medium-sized jugs and askoi were serving shapes, and large storage jars were finished in a beige slip that was sometimes painted in red-striped decoration. A brown coarse fabric newly appears in Miletus III, and this is the standard fabric used for cooking pots and small pithoi in both Miletus IIIa and IIIb. The rims of these brown coarse fabric cooking pots are consistent indicators of the two Miletus III strata, and many of these pots have tripod bases. Pithoi are rare throughout Miletus III.

The pottery of Miletus IIIb is a better fired and less porous product, with some modification in inclusion strategy. Shape preference shifts from Miletus IIIa to IIIb, especially in the cups and bowls, though most of the Miletus IIIb shapes have predecessors in Miletus IIIa. The only shapes that are completely fresh in Miletus IIIb are the distinctive tumbler, grillstand, baking tray, and lamp stand, all of which develop and continue in Miletus IVa (Kaiser and Raymond 2015, 150).

The Minoanising assemblage expands considerably in Miletus IVa, there is a high quantity of cups and small bowls, and new shapes include the lipless bowls, piriform and conical rhyta, askoi, and fire-boxes. Most material occurs in the Common Milesian Coarse Ware (CMCW), though some appears in a Red Wash Ware (RWW). Improved clay treatment encouraged mass pottery production, and well-fired Miletus IV ceramics seem to depend on a better knowledge of kilns and how to control them – although it is unclear if this was the result of knowledge transfer or indigenous development. The inhabitants of Miletus IVb seemed to interact with the Aegean world in a way similar to that of IVa. Pottery production and consumption stayed the same, and there are no new wares, shapes, or remarkable technological developments.

In the Miletus V First Mycenaeanising Phase, the tripod cooking pot morphed into a Mycenaeanising style, while other ceramics closely followed the Minoanising shapes of Miletus IV, with a reduction of the Red Wash Ware (RWW) shapes. An interesting example of a probable reverse influence of the Milesian pottery tradition on later Mycenaean ceramic assemblages could be offered by the study of a bowl shape. Indeed, newly attested in the period is a locally-produced bowl that is considered a typical Mycenaean bowl shape, with a range of variability: the shallow angular bowl. This shape, especially the type A (FS 295, type A) with a carination and a linear, banded decoration also on the interior and sometimes a spiral inside, on the base, or in a monochrome variant appears already in Miletus V, although P. Mountjoy notes that it first appears in the repertoire of decorated shapes in the Postpalatial period (Mountjoy 1986, 153, fig. 197, type A; 179, fig. 233). There are no imports at Miletus that resemble this

shape variation; it seems to be an indigenous or eastern Aegean development, therefore one could even think that the Milesian development was at the origin of the wide diffusion of that shape in LH IIIC. The Miletus V inhabitants were clearly savvy with ceramic production, and numerous kilns were in use (as discussed above). Miletus V also saw the introduction of a local, decorated pottery group, Class X (Figs. 4.4–4.7). Though it is attested in small quantities, the shape repertoire clearly partakes in the regional ceramic styles of Anatolia, including carinated kraters (some with spouts), stands, and basket-handled bowls. Class X is either decorated in a red or brown monochrome or in a matt, dark-on-light style in wavy lines or bands.

The Second Mycenaeanising Phase of Miletus VI–VII is a complete departure from Miletus V, and a new brownish ware as well as new Mycenaeanising shapes appear throughout the assemblage (such as the shallow angular bowl, becoming the most common open shape. See Table 4.2). The Miletus VI local fabrics, shapes, and surface treatments are divorced from the defined indigenous, coastal Anatolian styles of Miletus V (with some residual Class X decorated pottery).

One takeaway from this overview is that small and medium vase shapes and their associated function were essential to the inhabitants of each period, and activities at the site dictated a supply of certain small and medium Minoanising or Mycenaeanising shapes. This urgency to update did not apply to cooking pots and pithoi, for these large vase shapes lagged behind, with the indigenous coastal Anatolian type cooking pots used up to Miletus IVa, and the Minoanising pithoi used with Mycenaeanising cooking pots in Miletus V. A resolve to modernize also did not affect the decoration of pottery in a thorough manner, for the preference or tolerance for red slip and red wash finishes is acute from Miletus III until Miletus V. Perhaps imported decorated wares were sufficient until imitation of Mycenaean painted styles began in Miletus V. Overall, ceramic acculturation in the Minoanising Phase and the First Mycenaeanising Phase at Miletus was a top-down and not a bottom-up affair. Drinking cups were the first to break with indigenous coastal Anatolian standards, and cooking pots and pithoi were the last to adapt.

## Hybrids Born

To be frank, the authors of this paper do not all agree on the need or benefits of using the language of ‘hybridisation,’ but all can appreciate the humour of P. Stockhammer’s statement:

Hybridization – many archaeologists consider this term either to be unnecessary, or a concept that will be helpful at any conceivable occasion (Stockhammer 2012, 43).

Limitations certainly include that a ‘hybrid’ presupposes the existence of ‘the pure,’ and that an eagerness to document ‘hybridisation’ may gloss over distinct modes of cultural expression. Nonetheless, the authors here agree that ‘hybrid’ can in practice refer to pottery groups that have indigenous coastal Anatolian features mingled to varying degrees with Minoan or Mycenaean characteristics. Discussed in this section are two such pottery groups from Miletus, the Miletus III–IV S-profiled cup and the Miletus V–VI Class X kraters. Because the use of ‘hybrid’ terminology is not uniform at Miletus, it is impossible to declare a ratio of hybrid to non-hybrid portions of the material assemblage. While the language of ‘cultural entanglement’ may ultimately lend itself to greater precision in the documentation of Bronze Age Miletus, ‘hybridisation’ is used here as a current and attractive umbrella term for what may be the four-stage process of appropriation, that is, “appropriation, objectivisation, incorporation, and transformation” (Stockhammer 2012, 48; 2013).

## S-Profiled Cup of Miletus III–IV

A diachronic study of the S-profiled cups is quite instructive about Minoanising trends at Miletus: while the shape of this cup is Minoanising, the surface treatment reflects indigenous coastal Anatolian practices. The Miletus S-profiled cup shape was in use throughout Miletus III and IV and, as shown in Table 4.6, it was the favoured cup in Miletus IIIb and IVa. The earliest, most complete example (Fig. 4.3, AT.98.210.04) comes from a ceramic deposit of Miletus IIIa, (Deposit 14, Miletus AT.98.210; Raymond 2005b, 105), where it was found with two red slip globular jugs, a cooking pot, and two spindle whorls. The cup is published elsewhere with photo and profile (Raymond 2005a, 189, Pl. XLVb right, Pl. XLVI, Miletus AT.98.210.4; 2009, 152, fig. 7 profile only), where it illustrates the difference between the Miletus IIIa S-profiled cup and the Miletus IIIa carinated cup. The S-profiled cup in Miletus IIIa has a flat base, a somewhat rounded carination, and a short, everted rim; it was made in medium-fine beige fabric, finished in red slip, and ranged in rim diameter from 10 to 18 cm (Raymond 2005b, 86, 141, fig. 3.5 for nine profiles, Pl. 4).

A point of clarification is necessary here. Because the Miletus IIIa assemblage is of sufficient size, it is clear that the Miletus S-profiled cup (also called the hemispherical or semiglobular cup) is *distinct from the Miletus carinated cup shape*, which has a low, sharp carination and a tall, pointed rim (Raymond 2005a, 189, Pl. XLVb left, Pl. XLVI, Miletus AT.98.261.1; 2005b, 85–86, figs. 3.1–3.4 for 27 profiles, Pl. 4; 2009, 152, fig. 7, upper four profiles). At other sites in the eastern Aegean, the term ‘carinated cup’ is used more generally, often referring to any one

Table 4.6 Cups and Bowls in Miletus IIIa, IIIb and IVa

Shape Corresponding Aegean period	Miletus IIIa Minoanising, early MM IB–IIB	Miletus IIIb Minoanising, moderate MM III/LM IA	Miletus IVa Minoanising, extensive LM IA
<b>CUPS</b>			
Carinated cup	Most common cup shape Potentially Minoanising (Raymond 2007) Anatolian red slip	Decreases	Disappears
S-profiled cup (semiglobular cup)	Common cup shape Minoanising shape (proto-palatial) Anatolian red slip	Most common cup shape Minoanising shape Anatolian red or clear micaceous slip	Very common cup shape Minoanising shape (neo-palatial) Anatolian red wash or plain
<b>BOWLS</b>			
Bead rim bowl	Most common bowl shape Anatolian shape Anatolian red slip	Decreases	Disappears
Inward-sloping ledge rim bowl	Common bowl shape Anatolian shape Anatolian red slip	Very common bowl shape Anatolian shape Anatolian red or clear slip	Disappears
Bevelled rim bowl			Very common bowl shape Anatolian shape Anatolian red wash or plain

handled cup with a carination (Benzi 1984; Marketou 1988; 1990a; 1990b; 1998; 2009, 82, fig. 12). At Miletus, the S-profiled shape is not conflated with the carinated cup shape, because this would blur a precise discussion of its development from Early Bronze Age vases. The Miletus III carinated cup shape has promising *comparanda* from Rhodes and Samos, and – as has been argued for both Miletus and Rhodes – this specific type of carinated cup has potential indigenous Early Bronze Age predecessors (Raymond 2005b, 133–141; 2007, 223–225; Marketou 2009, 82; 1990b, 102 fig. 5).

The Miletus IIIa S-profiled cup, with its short, everted, and pointed rim, has neither an Early Bronze Age Miletus II predecessor nor thus far any Anatolian or island MBA parallels at Aphrodisias, Beycesultan, Samos, Kos, or Rhodes. The most credible prototypes for the Miletus S-profiled cup are the Miletus III Kamarae ware semiglobular cups imported to the site, such as the white-dotted Kamarae cup Miletus AT.99.597.1 (Fig. 4.3). This elegant, thin-walled cup has a brownish-black slip with irregularly spaced white dots, and it may be MM IIA in date. (For more examples of Kamarae semiglobular cups imported at Miletus and further arguments, see Raymond 2005b, 111–112, fig. 4.4; 2007, 225, fig. 26.3.) It seems entirely plausible – and indeed it is the simplest explanation – that the Miletus S-profiled cup lifted its shape from the imported Cretan examples, while it

maintained a coastal Anatolian decoration, the red slipped and burnished finish.

In Miletus IIIb, this S-profiled cup shape became “the cup of choice,” demoting the Milesian carinated cups (Fig. 4.3, S-profiled cups AT99.658.02, AT00.184.03 and Table 4.6).

Most Miletus IIIb examples were better-fired, and were finished in the standard, indigenous red-slip burnish, with a few examples in a micaceous slip. In Miletus IVa, the shape as illustrated in Fig. 4.3 was heightened and the rim softened, which parallels the development of this cup shape from the proto- to the neo-palatial period on Crete. The shape continues in Miletus IVb, often in red wash. The Miletus IIIb and IV S-profiled cups (Fig. 4.3; AT99.658.02, AT00.184.03, AT98.024.02) show similarities with LBA IA semiglobular cups from Kos/LM IA Koan cups (Vitale and Hancock Vitale 2010, 67, fig. 2.1).

Over the same time frame, the companion piece for the S-profile cup – the inward-sloping ledge rim bowl – tells a different story. This Miletus IIIa bowl is indigenous coastal Anatolian in both shape and decoration, with no Miletus II predecessor and thus far only one regional parallel at Tavşan Adası (Raymond 2005b, 76, fig. 3.11, Pl 4; Kaiser and Raymond 2015, 157, fig. 5). (These bowls are distinct from the MM III ledge rim bowls, so well published by Knappett and Cunningham from Palaikastro, because the Miletus rim shape has a severe inner edge and the Miletus base is often

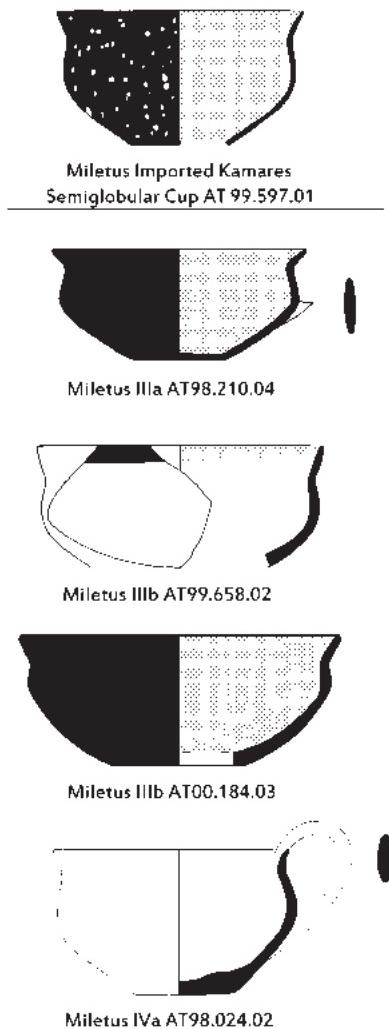


Fig. 4.3 Miletus III–IV S-Profiles Cups (AT.98.210.04, AT.99.658.02, AT.00.184.03, AT.98.024.02) and imported Kamares Semiglobular Cup (AT.99.597.01). Scale 1:3 (A. Raymond, B. Niemeier, and R. Doscan).

rounded, cf. Knappett and Cunningham 2012, figs 5.3, 5.4, 5.25 and 5.30. Also see A. Simandiraki 2002, Type 1 bowl, 167, 420, fig. 026). The Miletus inward-sloping ledge rim bowl develops and becomes the bowl of choice in Miletus IIIb, overshadowing that hallmark of the Anatolian MBA, the bead rim bowl (Table 4.6). Like the S-profiled cup, it is most often finished in a red-slip burnish, with a few examples in a clear, micaceous slip. Unlike the S-profiled cup, this shape is discontinued in Miletus IVa, when it is perhaps replaced by the bevelled rim bowl.

The S-profiled cup is one vase shape that sustains the red wash tradition in Miletus IVa. These cups occur in both the Common Milesian Coarse Ware (CMCW) and in Red Wash Ware (RRW), but the S-profiled cups and small bowls are shapes that persist with the red wash decoration in a

statistically significant way. In fact, these red wash cups and bowls add to the overabundance of small open shapes in the Miletus IVa stratum. The companion piece of the S-profiled cup in red wash is the bevelled rim bowl, a decidedly non-Minoanising, coastal Anatolian shape with inland river valley parallels. While the S-profiled cup is a Minoanising shape and developed at Miletus from Phases III to IV in the same manner that the shape developed on Crete, it survives in the most intensively Minoanised environment at Miletus with an indigenous coastal Anatolian style of decoration and bowl pairing (Fig. 4.3 and Table 4.6).

### **Class X of Miletus V–VI**

The ‘Local Decorated Pottery’ or Class X of Miletus V–VI refers to a red or brown painted ware, which is either monochrome or is decorated with wavy lines or bands, sometimes on a thick, cream-coloured slip. The paint is always matt. The fine, micaceous, sometimes calcareous clay is usually reddish brown or beige. Some examples are hard-fired, while others are quite porous and soft. Nevertheless, based on macroscopic observation, they all seem to belong to a local or regional clay body and some resemble the fabric of the Red Wash Ware. The repertoire of shapes partakes in the regional, indigenous ceramic styles of Anatolia, and it includes large carinated kraters (which are occasionally spouted), stands, and basket-handled bowls.

This ware should not be constrained by a definition that it is Mycenaean in decoration and indigenous Anatolian in shape, since it shows further mixtures of these two traditions. In some cases, it is not certain that some non-Mycenaean shapes are truly Anatolian because regional parallels are not clear. P. Mountjoy has amply discussed this issue, *i.e.*, the relationships between the Mycenaean pottery of the Greek Mainland, of the East Aegean islands, and of West Anatolia together with the definition of the East Aegean–West Anatolian Interface, where the settlement of Troy constitutes its northern border and the island of Rhodes its southern one (Mountjoy 1998). An analogous situation can be observed on Rhodes, where Mycenaean expansion in LH IIIA2 is also evident and its material culture, especially in the southern part of the island, shows a combination of Minoan, Anatolian, and Mycenaean traits. One hybrid pottery group on Rhodes that dates to this expansion phase is the so-called group of the Rhodo-Mycenaean shapes, which can be dated to LH IIIA2. They constitute only a small part of the Rhodian material, since the bulk of the corpus is standard Mycenaean as Mountjoy underlines (Mountjoy 1999, 983–984). Another interesting mixture of Mycenaean, East Aegean, Anatolian, Rhodian, and Minoan features has been detected in the ceramic material of Astypalaia (southwest of Kos), especially that material dating to LH IIIA2 (Mountjoy 1999, 1138), as can be seen in some ceramic material uncovered in a chamber tomb at

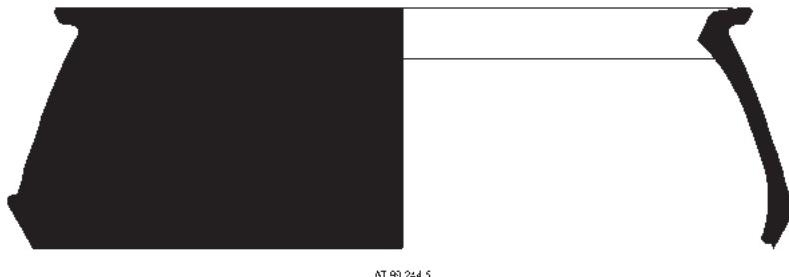


Fig. 4.4 Miletus Class X Type 1 Krater AT.99.244.05. Scale 1:3 (R. Doscan).

Synakairos on the north coast of the island (Doumas 1975, 372, pl. 272 β).

The krater appears to be one of the most attested shapes in Class X, and it is possible to distinguish three different krater types to further define the development of the ceramic assemblage for the Mycenaeanising Phases at Miletus. A Type I krater (such as Miletus AT.99.244.5 in Fig. 4.4 and Miletus AT.99.439.02 in Fig. 4.5) refers to matt-painted, monochrome dark (red or reddish brown) carinated kraters, with vertical handles and sometimes knobs on the rim or handle (probably reminiscent of metalwork tradition), as known from the four-handled fruit-stands in red lustrous wash and from later carinated kitchen ware examples at Beycesultan (Mellaart 1995, 37, fig. P. 15, 6–8 and fig. P.45, 8). The watered-down paint shows clear reminiscences of the red wash decorated tradition. A Type II krater (such as Miletus AT.99.83.2 in Fig. 4.6) refers to mostly wavy-lined decorated vessels, which resemble Mycenaean exemplars in decoration (see Mountjoy 1986, 83, fig. 99; 87, fig. 104:1; 92, fig. 112) but probably local indigenous Anatolian artefacts in rim shape. Type III kraters (such as Miletus AT.99.74.08 in Fig. 4.7) are vases that appear to be entirely in the Mycenaean fashion and are copies of the Mycenaean drinking vessels in shape as well as in decorative mode. This can be considered the locally produced Mycenaean pottery.

Type I kraters do not seem to have any convincing parallels in the contemporary Late Bronze Age pottery of other West Anatolian or East Aegean sites and islands with similar material assemblages, for example at Pilavtepe, Bademgediği Tepe, Çine-Tepecik, Rhodes, Astypalaia, and Kos. Regarding the Type II krater, there are various parallels in other West Anatolian sites. From Çine-Tepecik, situated in the hinterland on the plain of the Çine Çayı, the rim shape of a krater (FS 282), probably of local production with a yellowish-red and grey core clay, a pale brown slip and a red decoration (Günel 2010, 37, fig. 18), shows similarities to the Milesian Type II kraters. From the chamber tomb at Pilavtepe near Milas (Benter 2009), which was in use from LH IIIA2 to LH IIIC Early and contained 30 vases and vase-fragments, mainly Mycenaean, there is a very peculiar three-handled carinated krater with a pedestal base and wavy-band decoration (Inv. Nr. 2854, Benter 2009, 356, fig. 6.12



Fig. 4.5 Miletus Class X Type 1 Krater AT.99.439.02 (Foto: J. Zurbach).

and fig. 8), which is also very similar to Milesian Type II kraters, especially in rim shape, carination, and decorative motif. According to Benter, this krater from Pilavtepe very closely resembles two others found in a chamber tomb at Synakairos on the island of Astypalaia, and it also shows similarities to the large, carinated, high-footed bowls from the non-Mycenaean settlements of Troy VI (Middle to Late) and to the fruitstands of Beycesultan II (Benter 2009, 354). Another very peculiar krater, manufactured locally and in pictorial style from the site of Troy (Mountjoy 2006, 107–108, nr. 2, fig. 1), can also be compared to Milesian Type II exemplars, because of the shape. The krater type III refers to the locally manufactured Mycenaean kraters and appears at many sites of the East Aegean–West Anatolia interface (Mountjoy 1998; 1999; 2006; Meriç and Mountjoy 2002).

### Miletus in the Region

The Miletus Minoanising Phase and First Mycenaeanising Phase have the markings of a community that is peripheral to an Aegean core zone while it maintains a coastal Anatolian

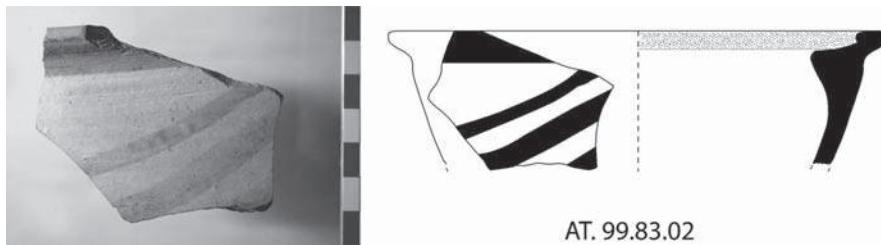


Fig. 4.6 Miletus Class X Type 2 Krater, AT.99.083.02. Scale 1:3 (L.-C. Rizzotto, Ink: H. Möller. Foto: J. Zurbach).

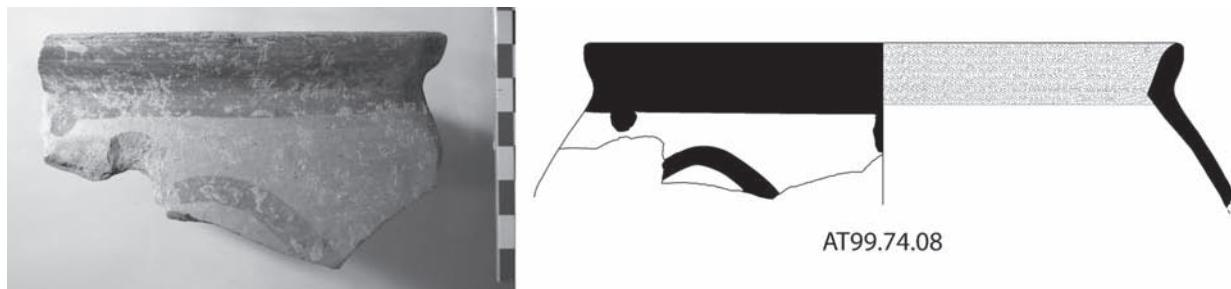


Fig. 4.7 Miletus Class X Type 3 Krater, AT99.074.08. Scale 1:3 (L.-C. Rizzotto, Ink: H. Möller. Foto: J. Zurbach).

identity. Because absorption of Aegean traits was on-going and the Aegean core zone of influence moved from Crete to the Peloponnese in the LBA, acculturation at Miletus almost pulsates with its mechanisms to adapt, modify, and transform material goods from period to period. Most interestingly, these mechanisms at Miletus occurred in the Minoanising Phase when the site accommodated some ritual activity. The ritual or sanctuary area saw multiple periods of use from Miletus IIIb to IVa (which, as mentioned above, included six altar platforms, 15 stationary plaster offering tables, overturned drinking cups, rhyta, and deposits of ash with butchered animal bones). If this acculturation process was instigated by Minoans who were motivated to be in Milesia to secure a place within a trade route and have access to copper or tin, then this sanctuary constitutes evidence of Minoanised ritual activity within that commercial endeavour.

The Minoanising Phase at Miletus is echoed at the sites of Teichoussa/Akbük and Tavşan Adası, both coastal sites that are 15–20 km south of Miletus, to the southeast and southwest respectively (Fig. 4.2). All three sites have regional ties as well as Minoanising material and imports. W. Voigtländer published the finds from Teichoussa/Akbük (Voigtländer 1982; 1986; 2004; 2009), and the Neopalatial ceramic material quite closely resembles that from Miletus IVa (Voigtländer 1986, 643, no. 27, fig. 20; 2004, 127–131, 303–309), with Minoanising cooking pots with grooves beneath the rim and other shapes (Voigtländer 1986, 644, no. 32, fig. 21, nos. 36–37, fig. 22, 646–650, nos. 39–61, figs. 22–24) and Koan imports (Voigtländer 1986, 644, nos. 28–33, fig. 21; 2004, 303–309, nos. 34 and 35).

The director of the current excavations at Tavşan Adası,

F. Bertemes, reports that the site has a MBA period (TA 3) with two building phases, well-built walls, a kiln, Kamares imports, Protopalatial style cups and bowls, loomweights, spindle whorls, and murex snails (Bertemes 2009; 2010, 153–154; 2013). The LBA period (TA 4) corresponds to Miletus IVa, it has Cretan and eastern Aegean imports, and it exhibits architecture that resembles the houses at Palaikastro (Bertemes 2010, 152). There is not a post-Theran-destruction level at Tavşan Adası that equates with Miletus IVb. Some distinctive coastal Anatolian vase shapes at Tavşan Adası have parallels with Miletus, such as the Miletus III inward sloping ledge rim bowl and the Miletus IV bevelled rim bowl, and red wash is found at both sites.

These three sites – Miletus, Tavşan Adası, and Teichoussa/Akbük – are contemporary and interrelated, with clear overlaps in coastal Anatolian traits, ceramic production, and imports. The building phases of the early Minoanising Miletus III coordinate well with those at Tavşan Adası, and some vase shapes in Miletus III have unique parallels at this ‘Rabbit Island’ site. But, in the extensive Minoanising period of Miletus IVa, the similarities between Miletus and Teichoussa/Akbük seem to be much stronger than those between Miletus and Tavşan Adası (or those between Teichoussa/Akbük and Tavşan Adası).

Perhaps the best explanation for the triangular arrangement of these sites is that, together, they provide an expansive view of the Aegean coast. From Miletus, the view extends to the north and west, from the mouth of the Maeander River and the Mykale peninsula to Samos. From Tavşan Adası the view is unimpeded of the Aegean, to Agathonisi, Pharmakonisi, Arkos, and Lipsi. For the inhabitants on the

bay at Teichioussa/Akbük, the view was to the south and southwest, to the Halikarnassos peninsula and portions of Kalymnos and Leros. With some coordination, these sites could have provided a protective lookout for the Milesian region in the Minoanising Phase.

The well published site of Iasos is located farther south on the coast between Milesia and the Halikarnassos peninsula (Momigliano 2000; 2005; 2009; 2012). It is likewise a Minoanising site, but with a production area that is distinct from Miletus. Occupation at Iasos correlates well with the Neopalatial Minoanising Phase at Miletus and later, but there are no stratigraphic levels at Iasos that correspond to Middle Bronze Age Miletus IIIa (Momigliano 2005, 222; 2012, 155). The examples of ceramic interchange (such as Milesian imports at Iasos, Momigliano 2012, 164) and the obvious Minoanising trends reflect a relationship between Neopalatial Iasos and Miletus IV, while the nature of that relationship is unclear. Momigliano understands Iasos as most probably reliant on larger sites, such as Miletus or the Serraglio on Kos, for its connection to Crete or Cretan trends (Momigliano 2012, 166–170). This places Iasos within a network that potentially involves Miletus, though Iasos seems culturally distinct from the micro-region of Miletus, Teichoussa/Akbük, and Tavşan Adası.

The new excavations at the Heraion on Samos, directed by W.-D. Niemeier and O. Kouka, have opened LCh–LBA levels (Niemeier and Maniatis 2010; Kouka 2012; Niemeier 2010, 112–114; 2011, 104–105; 2012, 100–101; and *Archaeological Reports* 2009–2010, 156–157). In addition to an EB II fortified settlement, they are documenting a Minoan presence with cult equipment/cultic installations on the spot of the later sanctuary of Hera. Further assessment of Milesian and Samian *comparanda* awaits. Sites farther to the north, such as Ayasuluk at Ephesus and Kocabıştepe, Limantepe, and Çeşme-Bağlararası in the Izmir region represent a separate cultural zone with discreet *comparanda* for Miletus, but with significant variation in ceramic wares from the southwestern Anatolian sites.

## Conclusions

When the Aegean core zone moved from Crete to the mainland in the First Mycenaeanising Phase, the function of the site shifted as well, with a renewed interest in the pottery production of indigenous and hybrid wares. Consequently, acculturation is discerned at Miletus from two different Aegean core zones, and the processes are documented as the site function and landscape changes. The position of the site shifts from the Minoan to the Mycenaean periods, because Miletus III was situated directly on the shoreline whereas the later Minoan and Mycenaean communities were on a higher elevation. This generates new questions: What can be garnered about social identity or social contacts from

the continuity of coastal Anatolian traits in the ceramic assemblage amid these major shifts in site function and Aegean influence? Can the nature and intensity of the meeting of social groups be detected in order to recognize “trans-regional and local subjectivities and identities” (Knapp 2010, 5, 7)? Additionally, while Miletus is peripheral to an Aegean core zone in its Minoanising Phase and First Mycenaeanising Phase, the persistence of the indigenous coastal Anatolian traits may speak to a reciprocating effect or a potential coastal Anatolianising process external to the eastern Aegean. It could be that Miletus served as some community’s core zone until Miletus VI (LH IIIB).

Miletus in the First Mycenaeanising Phase is notable in the region because of its early and massive presence of Mycenaean imports, its local production of Mycenaean shapes, and the resilience of the Miletus IV inheritance (on this phase, see Kaiser and Zurbach 2015). Miletus is not an isolated Aegean settlement with Anatolian settlements to the north, south and east, but a Mycenaeanising site *within* a previously Minoanised region that exhibits local innovation, an influx of Peloponnesian imports, and a complex pattern of regional exchange. It seems unlike Iasos and Bademgediği Tepe where imports are secondary to local production. The grey wares known so well in the Izmir region and at Bademgediği Tepe are not found at Miletus, and locally produced Mycenaeanising pottery to the northeast at Çine-Tepcik (Günel 2010) appears at some point in LH IIIB and not earlier. The impact of Mycenaean contacts is evident in the ceramic assemblage at Miletus, with an early and complex acculturation process that included the continuation of some Miletus IV Minoanising shapes, the imitation of Mycenaean shapes, and the appearance of hybrids such as Class X.

In the Second Mycenaeanising Phase of Miletus VI, the acculturation process changed, trumped by a more pervasive Aegean influence or migration. While the material evidence reflects a flourishing era in the 14th century BC, at the end of the Miletus V phase (around 1319/18 or 1315/14 BC) the settlement of Millawanda underwent a heavy destruction by fire, most probably due to the Hittites under Mursili II. There was probably a transition of power during Miletus VI, and whereas the material culture even increased its Mycenaean character as the archaeological record attests, Hittite characteristics and features appear – in particular the fortification wall that was probably erected by the Hittites themselves against possible naval attacks by the Greeks. Perhaps, in such a state of affairs, the Hittite rulers were simply unconcerned with the Mycenaean character of local vases.

While it is challenging to document acculturation processes, this diachronic study does successfully trace the emergence and loss of various local and non-local traits at Miletus. Miletus is one site on the Anatolian coastline south from Çeşme-Bağlararası that seems to be “far more

integrated into the Minoan world than any other place” given the current state of excavation (Davis and Gorogianni 2008, 385). Miletus also yields the earliest Minoan imports (MM IB) and the largest quantity of Kamares ware in the eastern Aegean in Miletus III, as well as evidence of extensive, neopalatial Minoanising ritual, artistic, industrial, and dietary habits in Miletus IV. Still, the Milesians maintained a consistent thread of non-Aegean, coastal Anatolian traits. Even after centuries of central and western Aegean contact in Miletus III and IV, the assemblages of Miletus V are so consistently mixed that there is no ‘Anatolian’ vs. ‘Mycenaean’ house, room, or context. The Milesian identity presented and was preserved in the acculturated, transformed state, perhaps best described as part of the “new environment” (Davis and Gorogianni 2008, 379–381). Miletus offers a unique opportunity to detect acculturation processes that were quite active, and despite this reminder of how much more material analysis awaits, the Niemeiers’ excavations at Miletus have already engendered a more nuanced and vibrant understanding of Bronze Age activity in the southeastern Aegean.

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## Note

- Defining ‘Minoanisation’ is a work-in-progress that began in the 1980s in the central and western Aegean (Davis 1980; 1986; Niemeier 1986; Overbeck 1989; Papagiannopoulou 1991; Hiller 1993). The term was scrutinised by C. Broodbank in his fundamental article (Broodbank 2004) and examined elsewhere (especially by Davis and Gorogianni 2008; Cutler 2011; Momigliano 2012; Girella and Pavúk 2015). Ultimately, cultural interaction must be addressed within a broader conceptual framework (such as by Knappett 2011).

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# CULTURAL ENTANGLEMENTS ON KOS DURING THE LATE BRONZE AGE: A COMPARATIVE ANALYSIS OF ‘MINOANISATION’ AND ‘MYCENAEANISATION’ AT THE ‘SERRAGLIO’, ELEONA, AND LANGADA

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From the beginning of the local Late Bronze Age (LBA), a significant number of Minoan and Mycenaean cultural features began to appear at the settlement of the ‘Serraglio’ and the cemeteries of Eleona and Langada on Kos. The aim of this contribution is to better define the adoption of these elements on the island and to discuss the meaning of the evidence in light of current interpretative frameworks.

In order to achieve this goal, this paper is divided into four main sections: (a) an introduction focused on terminological questions and the nature of the available evidence; (b) a brief overview of Kos during the Early and Middle Bronze Age (MBA), the periods that precede the appearance of Minoan and Mycenaean cultural features on the island; (c) a phase by phase survey of the evidence for Minoanisation and Mycenaeanisation on Kos during the LBA; and (d) a discussion of the significance of the data. These sections are followed by some concluding remarks.

## Introduction

The terms ‘Minoan’ and ‘Mycenaean’ have recently been the subject of debate and criticism. Obviously, both are modern constructs, carrying the risk of anachronistic concepts (Hamilakis 2002, 16; Broodbank 2004, 50–54; Karadimas and Momigliano 2004; Melas 2009, 70; Momigliano 2009, 121–123). It has been argued that words based on simple geographical expressions, such as ‘Cretan’ in the former instance, may represent a reasonable alternative (Broodbank

2004, 51). However, there has been general consensus that such choices would not necessarily be effective (Broodbank 2004, 54; Davis and Gorogianni 2008, 388, note 1; Niemeier 2009, 12). Attention should be moved from the signifiers to the signified. Concrete progress would probably consist of agreeing upon new definitions that, ideally, would be as neutral and rigorous as possible.

Readapting J. C. Wright’s words (Wright 2004, 134), within this paper, the term ‘Minoan’ refers to the characteristic assemblage of cultural diacritics that originated on the island of Crete during the Early Bronze Age (EBA) and whose existence and changes can be followed throughout the Middle and LBA periods. In turn, the word ‘Mycenaean’ signifies the characteristic assemblage of cultural diacritics that originated on the Greek mainland in the late MBA and whose existence and changes can be followed throughout the LBA. In the archaeological record, these diacritics may be identified by the presence of specific artefacts that qualify as individual cultural indicators.

The ‘rescue’ of the terms Minoan and Mycenaean should by no means imply the uncritical acceptance of their derivatives (see Broodbank 2004, 51). The words ‘Minoans’ and ‘Mycenaeans’, which are often used to indicate in a generic way two complex and relatively heterogeneous groups, call once again for explicit definitions, if not for deconstruction. As in the previous case, the more neutral and rigorous, the safer. In this paper, the terms ‘Minoans’ and ‘Mycenaeans’ are employed to define those groups that can be associated with a complete or at least a reasonably large

assemblage of their respective cultural diacritics. Obviously, these groups of peoples would correspond primarily to the Bronze Age inhabitants of Crete and to those of the south and central Greek mainland respectively.

Of particular relevance to the subject under discussion, the terms ‘Minoanisation’ and ‘Mycenaeaneanisation’ are used to indicate the spread of Minoan and Mycenaean cultural diacritics beyond their original regions (Broodbank 2004, 51; Niemeier 2009; Feuer 2011, 527; all with previous bibliography). Minoanisation and Mycenaeanisation, however, do not necessarily imply the expansion of the Minoans and the Mycenaeans outside of Crete and the Greek mainland.

The analysis proposed here is primarily based on the evidence recovered by L. Morricone during the 1935 to 1946 Italian excavations at the ‘Serraglio’ and the related cemeteries of Eleona and Langada (Morricone 1967; 1975; 1978). Since 2009, the materials from these excavations have been the subject of an extensive re-study, carried out in the context of the ‘Serraglio, Eleona, and Langada Archaeological Project’ (SELAP), a research endeavour directed by the author under the auspices of the Italian School of Archaeology at Athens. Complementary sources of information at our disposal are the more recent investigations by T. Marketou (Marketou 1987; 1988; 1990a; 1990b; 2004; 2009; 2010a; 2010b) as well as by other British and Greek scholars (Hope Simpson and Lazenby 1970; Papazoglou 1981; Georgiadis 2003; 2009; 2012).

The variable nature of these data requires extreme caution in the analysis and interpretation of the evidence. Despite Morricone’s attention to stratigraphy, the resolution of the information from his excavations is uneven, especially if compared to modern standards. The preserved materials constitute a large and varied collection of finds, but the sample exhibits significant bias, due to the arbitrary discard strategies that were typical of Morricone’s period. Obvious examples include the unusual prevalence of decorated vs. unpainted ceramics, the comparative scarcity of utilitarian and cooking vessels and, by contrast, the overabundance of specific pottery types of Minoan or Mycenaean origin, such as conical cups, fireboxes, and tripods. An additional problematic aspect is represented by the partial destruction of the original documentation, which occurred during the dramatic events of World War II. Lost data include most of the diaries from the excavations at the ‘Serraglio’, those from Eleona Tombs 1–20, as well as detailed drawings of plans, archaeological sections, and architectural features (Morricone 1967, 9 with note 1, 76, 80, 82; 1975, 147–149, 388).

Marketou’s investigations were carried out with up-to-date methodologies and have contributed tremendously to our knowledge of Bronze Age Kos. Since they were mostly executed in the context of rescue excavations, however, their scale was relatively limited.

### Kos Before Minoanisation and Mycenaeanisation: The Early and MBA Periods

During the Early and MBA, Kos shared significant cultural features with contemporary sites in the Dodecanese, western Anatolia, and the Aegean islands located in the vicinity of the Anatolian coast. Within this particular context, the main characteristics of what can be defined as the Koan local tradition were elaborated. As a result, Koan local tradition may be directly or indirectly defined as ‘western Anatolian’ (Marketou 1990b, 43–44; 2004, 20, 25–27; 2010a, 762–763; Vitale 2013, 61; Vitale and Trecarichi 2015, 313, 320, table 3).

The earliest finds from the larger area surrounding the ‘Serraglio’ come from the Askulpis region (Morricone 1950, 324–325, figs. 98, 101–102; Hope Simpson and Lazenby 1970, 47, 57, figs. 5, 7, pls. 19–20; Marketou 2004, 20; Morricone 1975, 261–271, figs. 210–225; Vitale 2013). Here, in 1943, Morricone unearthed three pithos graves and an oval cist or built pit, all dating to EBA 2. More or less contemporary pithos burials were also investigated by the Greek Archaeological Service at Mesaria, Tavla, and in the Asklepieion area (Marketou 2004; 2010a, 762–763). Significant evidence for the EBA phases on the island also comes from the Halasarna region in south central Kos (Georgiadis 2009; 2012).

The typology of these tombs as well as the attested burial practices, which included multiple interments, secondary treatment of the bones, and offerings placed within and/or just outside of the pithoi, follow western Anatolian customs, as previously recognised, among others, by Morricone, T. Stech Wheeler, and Marketou (Morricone 1975, 261; Stech Wheeler 1974, 419–420; Marketou 2004; 2010a, 763; Vitale 2013, 51–52, table 1, fig. 3). The pottery assemblage already includes some of the future defining typological characteristics of Koan LBA local tradition ceramics, such as: (a) the presence of handle attachments on the neck rather than on the rim of closed shapes; (b) the occurrence of biconical profiles; and (c) a remarkable preference for burnished exterior surfaces and monochrome decorative schemes on painted pottery.<sup>1</sup> Furthermore, there is a significant continuity between the EBA 2 and the LBA period in the range of the attested pottery classes (see below).

According to Marketou’s excavations, the settlement of the ‘Serraglio’ itself was founded during EBA 3A (Marketou 1990a, 101; 1990b, 40–41; 2004, 25–26; 2010a, 763). In this phase, it was surrounded by fortification walls and may have taken part in the so-called ‘international spirit’ of the Anatolian Trade Network period, as recently defined by V. Şahoglu (Şahoglu 2005). The most common pottery shapes were wheel-fashioned shallow rounded or carinated bowls (for the definition of the term ‘wheel-fashioned’, see Choleva 2012, especially 351–352), incised duck-vases, and depata (Marketou 1990a, 102, fig. 5; 1990b, 41, figs. 1–2;

2004, 26, fig. 8; 2010a, 763; Vitale and Hancock Vitale 2013, 47, fig. 4:2.a–d).

The occupation at the ‘Serraglio’ continued without any break into the MBA. During this phase, locally produced ceramics were characterised by the presence of wheel-fashioned carinated bowls and cups (Marketou 1990a, 102, fig. 5:b; 2010a, 763; Vitale and Hancock Vitale 2013, 47, fig. 4:2.e). Although not absent, imports from Crete and the Greek mainland do not seem to have had a significant impact on Koan material culture, representing less than 1% of the overall ceramic assemblage.

### Minoanisation and Mycenaeanisation on Kos: The LBA Period

The stratigraphic and chronological sequence of the ‘Serraglio’ during the LBA, including 21 small but closed floor deposits, was recently reassessed by combining Morricone’s accounts, a direct re-examination of the materials, and information from Marketou’s excavations (Table 5.1). Additional data were provided by the analysis of the ceramics from the cemeteries of Eleona and Langada (Vitale 2012a, 1237–1238, table 2), where 54 chronologically significant assemblages were identified (Table 5.2), including 16 closed groups and 38 stylistically ‘homogeneous find groups’ (for the definition of this term, see Furumark 1941b, 32). This sequence provides a solid stratigraphic framework for our examination of the evidence.

The earliest phases are termed LBA I, II, and IIIA1, because during these periods Koan material culture was still typified by a strong local character, reaching back to the western Anatolian based traditions of the Early and MBA. From Late Helladic (LH) IIIA2 onward, the typical Mycenaean sequence and terminology can also be applied to Kos (Vitale 2007, 44).

The significance of the appearance of Minoan and Mycenaean elements during the LBA is analysed with reference to the following features: ceramics, architecture, wall painting/iconography, funerary practices, ritual/cultic features, weaving equipment, bronze tools, weapons, and language/scripts. This list, which may not be fully exhaustive or immune to arbitrary choices dictated by the nature of the available data, is based on a long series of previous essays on the subject (Kilian 1990, 445–447; Wiener 1990; Niemeier 1998; Davis and Bennett 1999; Pulak 2005; Vitale and Hancock Vitale 2010, 70–74, table 3; Feuer 2011, 512–515).

### Settlement Preceding City I, First Phase: LBA IA Early

During LBA IA Early, pottery imports from Crete are scarce. However, for the first time, Minoan features are attested at the ‘Serraglio’ in significant quantities.<sup>2</sup>

Among decorated ceramics, there is no evidence of a local production of *true* Minoan types, but two new ‘culturally entangled’<sup>3</sup> classes appear, incorporating elements of the local tradition, as well as characteristics of Cretan origin (Table 5.3): ‘Painted Fine’ (PF) and ‘Painted Medium-Coarse to Coarse Light-on-Dark/Dark-on-Light’ (PMC–C LoD/DoL).<sup>4</sup>

PF pottery includes mostly wheel-fashioned semi-globular cups with a vertical strap handle (Fig. 5.1:a). In terms of surface treatment and forming technique, they do not show any obvious deviation from the previous local tradition. PF semi-globular cups are normally smoothed or wiped and dull-painted, whereas their contemporary Minoan counterparts are usually burnished and have lustrous painted decoration. The relatively sharp curve of the upper body profile indicates that they are a direct evolution of Koan MBA local carinated cups (Marketou 1990a, 103). The use of the ‘dipped-rim’ technique and the occurrence of foliate bands and crescents, on the other hand, represent a close imitation of Minoan decorative schemes and/or motifs.

PMC-C LoD/DoL pottery, which will be analysed in more detail below, combines local tradition shapes and Minoan decorative features, such as the use of light-on-dark decoration (Fig. 5.1:b).

All of the remaining LBA IA Early ceramic classes (Table 5.3), including ‘Monochrome Red’ (MR), ‘Monochrome Dark’ (MD), ‘Unpainted Pale Fine’ (UPF), ‘Unpainted Pale Medium-Coarse’ (UPMC), and ‘Unpainted Pale Coarse’ (UPC) pottery (Vitale 2006, 76, fig. 3:c; 2007, 49, pl. 12:c; Vitale and Hancock Vitale 2010, 66, fig. 2:3; 2013, 47, fig. 4:2.h),<sup>5</sup> were already attested during EBA 2, representing an impressive element of continuity of the Koan local tradition, despite the occurrence of obvious diachronic changes (Vitale 2013, 55, tables 2–3, figs. 4–7; Vitale and Trecarichi 2015, 320, table 3).

Apart from the ceramic evidence, there are no secure traces of other Minoan-type elements in the material culture.

### Settlement Preceding City I, Second Phase: LBA IA Mature

During this period, the ‘Serraglio’ experiences a rich phase, taking advantage of its most favourable position on one of the main maritime trade routes between the eastern and western Aegean.

The LBA IA Mature ceramic repertoire is characterised by: (a) the disappearance of PF semi-globular cups; (b) the popularity of locally produced conical cups (Fig. 5.1:c–e), which belong to a pottery class called Minoan Fine Unpainted (MiUF; Table 5.3); (c) the floruit of PMC-C LoD/DoL pottery (Fig. 5.1:f–g); (d) the continuation of all of the previously mentioned local tradition classes (Vitale 2006, 76, fig. 4:c; 2007, 45, 49, pl. 9:b, pl. 13:c; Vitale and Hancock Vitale 2010, 68, fig. 2:4, fig. 3:2–4; 2013, 47, fig.

Table 5.1 Reassessment of Morricone's Building Phases and Chronology of Significant Pottery Deposits from the 'Serraglio'

Morricone 1975	Main building phases	Height asl of the main floors/surfaces Serraglio      Zona Fadil	Marketou 1990a; Vitale 2006; 2007; 2012a	Main deposits
MBA/MM III	Settlement Preceding City I	Unknown	Below 10m	LBA IA Early (= LM IA Early–Advanced* or traditional MM IIIB; Akrotiri's seismic destruction)
				LBA IA Mature (= LM IA Final* or traditional LM IA; Akrotiri's volcanic destruction)
MBA III–LBA I or LBA I	City I	Below 6.45m	c. 10m	LBA IB
LBA IIIA (= end of the period)	City II	c. 6.45m  c. 10.55m  c. 7.50m	c. 10m	Serraglio: Zone I, room beside Tomb 11 resting level (May 1936); Serraglio: Zone II, sounding underneath <i>Vano A</i> first floor (November 1941); Serraglio: Zone II, <i>Cortile B</i> , lower level (November 1941).
				Serraglio: Zone I, room with burnt earth and coaly fragments (August 14, 1936);
				Serraglio: Zone II, room N of Room C (Summer 1941).
LBA IIIA–IIIB	City III	Between 7.25 & 8.60–8.90m	c. 11m	LH IIIA2–LH IIIB1
LBA IIIB Final (= end of the period)				LH IIIB1–LHIIIB2 Late
LBA IIIC	City IV	8.60–8.90m	c. 11.40m	LH IIIC Phases 1–4**  Serraglio: Zone II, vessel possibly associated with the room cut by Tomb 14 (June 4, 1936); Serraglio: Zone I, occupational surface E of Tombs 1, 2, and 6 (June 18, 1936).

\* For the chronology and terminology of the LM IA period, see Van de Moortel 2001; Rutter and Van de Moortel 2006.

\*\* For the chronology and terminology of the LH IIIC period, see Rutter 1977; 1978.

Fig. 5.1 (opposite) a. LBA IA Early: PF semi-globular cup, 'Serraglio', no. 1227; b. LBA IA Early: PMC LoD high-necked jug, 'Serraglio', no. 1221; c–e. LBA IA Mature: MiUF conical cups, 'Serraglio'; f. LBA IA Mature: PMC LoD oval-mouthed amphora, 'Serraglio'; g. LBA IA Mature: PMC LoD jug, 'Serraglio', no. 1206; h. LBA IA Mature: UPMC utilitarian jar, 'Serraglio'; i. LBA IA Mature: MiUMC firebox, 'Serraglio', no. 1351; j. LBA IA Mature: MiUMC tripod cooking pot, 'Serraglio'; k. LBA IA Mature: Imported Minoan Vapheio cup, 'Serraglio'; l. LBA IA Mature: Imported Mycenaean Vapheio cup FS 224, 'Serraglio'; m. LBA IA Mature/LBA IB: Local discoid loom-weight, 'Serraglio'; n. LBA IB: Imported Mycenaean semi-globular cup FS 211, 'Serraglio' (a, f–g: A. Caputo; b: A. Caputo, A. Trecarichi, and T. Ross; c: S. Vitale and A. Caputo; d–e: S. Regio and A. Caputo; h–i: S. Regio and A. Trecarichi; j–l, n: M. Rossin and A. Trecarichi; m: M. Rossin and T. Ross).



Table 5.2 Tombs with Qualified Pottery Groups from Eleona and Langada

	<i>LBA IIIA1</i>	<i>LH IIIA2</i>	<i>LH IIIB</i>	<i>LH IIIC Phases I–3</i>	<i>LH IIIC Phase 4</i>	<i>Not datable</i>	<i>Total</i>
Eleona T. nos.	3, 14, 17, 22 (4)	—	5, 19 (2)	—	1, 23 (2)	—	— 8
Langada T. nos.	—	3, 16, 25** (G. 3), 29, 38*, 51, 54, 56	21*, 28, 30, 36*, 40, 46*, 48, 49, 60	4, 5, 13, 22, 23*, 24*, 25** (G. 1), 25** (G. 5), 26, 31, 43*, 57** (G. 2)	1*, 2, 8, 9, 14, 18*, 32, 33, 34, 39, 45, 47, 50, 55	7*, 42*, 58*	
Total	4	(8) 8	(9) 11	(12) 12	(14) 16	(3) 3	46 54

Abbreviations: G.= Group; L.= Langada; T.= Tomb.

\* Single burial.

\*\* Undisturbed ceramic assemblages assignable to specific interments.

The tombs with no asterisks include pottery dating to a single chronological period only (Furumark's homogeneous find groups).

*NB:* Morricone describes the stratigraphy of Langada Tombs 25, 40, 50, 55, 57, 59, and 61 and states that he was able to recognise at least the latest interment of each tomb (Morricone 1967, 27–28). However, the association between the vessels from these graves and their interments is either unclear or not thoroughly explained, except in the cases of Tombs 25 and 57. For this reason, the latter are the only ones from this group that are included in the present table among closed deposits.

L. T. 25: G. 1= no. 82; G. 2= nos. 81, 399; G. 3= nos. 80, 83, 85; G. 4= no. 273; G. 5= nos. 84, 86.

L. T. 57: G. 1= nos. 225, 227; G. 2= nos. 230, 233, 235; G. 3= nos. 226, 229, 234.

4:2.i, fig. 4:4.b–d; Vitale and Trecarichi 2015, 320, table 3); (e) the occurrence of local tradition (Fig. 5.1:h) as well as Minoan-type utilitarian and cooking vessels (Fig. 5.1:i–j); (f) an increase in the quantity of Minoan imports (Fig. 5.1:k), most of which may have come from east Crete; and (g) the appearance of Mycenaean imports (Fig. 5.1:l), the majority of which may have had a northeast Peloponnese origin (the information on the possible provenance of Minoan and Mycenaean imports on Kos is based on macroscopic observation of LBA IA Mature ceramic fabrics by the author and J. Morrison).

PMC-C LoD/DoL pottery represents the creation of a new stylistic language, which entangles, in a sort of a ceramic pidgin, local tradition with Minoan features. Many of the attested shapes imitate Cretan types, such as the oval-mouthed amphora (Fig. 5.1:f), the beaked jug, the bridge-spouted jar, the hole-mouthed jar, the stirrup jar, and the straight-sided cup. Minoan influence is also obvious in the decorative repertoire, including spirals, flowers, ivies, hatched loops, leaves, foliate bands, reeds, crescents, and speckles, as well as the alternative use of the various LoD, DoL, and LoD-DoL techniques. Besides Minoan features, however, local tradition elements are represented by the preference for neck-handled (Fig. 5.1:g) rather than rim-handled jugs and biconical profiles. Some of the attested shapes, such as narrow-necked jugs, high-necked jugs (Fig. 5.1:b), and biconical jars may derive directly from local tradition and/or western Anatolian types. Strong idiosyncrasies are also evident in the decorative

repertoire, where simple geometric motifs, such as single and double wavy lines (Fig. 5.1:b, f–g), are extremely common, but there is no evidence of the ripple pattern, one of the hallmarks of Late Minoan (LM) IA, which was widely attested in the contemporary productions of Minoan pottery outside of Crete (for a discussion of Minoan and local tradition features in PMC-C LoD/DoL pottery, see Vitale and Hancock Vitale 2010, 68–70, fig. 2:2, 9–19, fig. 3:7–11, fig. 4:1–3; 2013, 50–52, figs. 4:2.g, 4:3.e–k, 5; both with previous bibliography). In terms of surface treatment and forming technique, there is nothing in PMC-C LoD/DoL which deviates from the previous local tradition and/or necessarily indicates a Minoan origin. Employed manufacturing techniques include fully handmade as well as wheel-fashioned specimens. At present, it is difficult to determine if LoD/DoL vessels were constructed by using a technique similar to that used by LM potters to produce their medium to large-sized jars. Some features, such as the common occurrence of an irregular thickness of the walls, may tentatively indicate that Koan LBA potters were using either a slower wheel than their Minoan colleagues and/or a different sort of wheel technique.

Minoan-type utilitarian and cooking pottery included locally produced fireboxes (Fig. 5.1:i) braziers (Morricone 1975, 283–285, nos. 1350–1359, figs. 248–249), and tripods with flat bottoms (Fig. 5.1:j), all of which can be assigned to a class called Minoan Unpainted Medium-Coarse (MiUMC; Table 5.3). Local tradition types comprised a variety of utilitarian and cooking jars (Fig. 5.1:h; see also Morricone

Table 5.3 Classification of the Koan LBA Ceramic Assemblage

Local Tradition Classes	Painted	Monochrome Red (MR)
		Monochrome Dark (MD)
Unpainted	Pale	Monochrome Black (MB)
		Monochrome Grey (MG)
Entangled Classes	Painted	Fine (UPF)
		Medium-Coarse (UPMC)
Minoan Tradition Classes	Unpainted	Coarse (UPC)
		Grey (UG)
Pottery	Painted	Fine (PF)
		Medium-Coarse (PMC-C)
Mycenaean Classes	Unpainted	Coarse
		Fine (MiUF)
Unpainted	Painted	Medium-Coarse (MiUMC)
		Coarse (MiUC)
Unpainted	Painted	Fine (MyPI)
		Medium-Coarse (MyPMC)
Unpainted	Painted	Course (MyPC)
		Fine (MyUF)
Unpainted	Painted	Medium-Coarse (MyUMC)
		Coarse (MyUC)

1975, 220, no. 1213, fig. 140; Vitale and Hancock Vitale 2010, 68, fig. 3:4; 2013, 47, fig. 4:4.d; Vitale and Morrison forthcoming). Unfortunately, because of arbitrary discard strategies, no quantitative assessment of these materials is possible, in contrast to contemporary assemblages from Miletus (see Kaiser 2005; 2009; Raymond *et al.* this volume).

As in the preceding period, during LBA IA Mature, culturally entangled, local tradition and imported Minoan and Mycenaean vessels are always found alongside one another, showing the composite nature of the ‘Serraglio’ material culture in these phases.

In addition to pottery, during LBA IA Mature, some further Minoan elements appeared for the first time at the

‘Serraglio’ in the local architectural repertoire and, most likely, in the weaving equipment assemblage.

As to the former, the new LBA IA Mature town plan, which was completely reorganised after a severe earthquake at the end of the preceding phase (Marketou 1990a, 103), included a polythyron decorated with blocks of fossil stones and orthostat constructions. Despite their Cretan stylistic connotation, however, these features had a ‘provincial’ character and were not built in a genuine Minoan technique (Marketou 1998, 63).

Very few of the locally produced or imported Minoan-type discoid loom-weights (Fig. 5.1:m) can be safely dated on stratigraphic grounds (Morricone 1975, 279, fig. 240), but it is very likely that some of them belong to LBA IA Mature and the succeeding LBA IB.

### **City I: LBA IB**

During LBA IB, ceramic imports from the Greek mainland increase (Fig. 5.1:n) and locally produced Mycenaean vases appear for the first time at the ‘Serraglio’ (Table 5.3; Fig. 5.2:a). All of the above mentioned ceramic classes of the local tradition continue to be manufactured (Vitale 2006, 79, fig. 5, 7:a; 2007, 49, 51–52, pl. 11:r, pl. 14:a, c; Vitale and Trecarichi 2015, 320, table 3). PMC-C LoD/DoL pottery is still present in abundant quantities (Marketou 2010a, 764), but seems to have lost its vivacity. The repertoire of shapes and motifs remains more or less unchanged from the previous phases and none of the innovations developed during LM IB are adopted, although imports from Crete are well attested on Kos (Morricone 1975, 328–330, fig. 318; Marketou 1987). These elements suggest a decrease in the influence exerted by Minoan ceramic models, as well as the stagnation of the phenomena of cultural entanglement characteristic of the preceding periods (Vitale and Hancock Vitale 2010, 74–75). It is possible that these facts are related, at least partially, to the consequences of the Santorini eruption that, during a mature stage of Late Cycladic IA, destroyed the settlement of Akrotiri, a crucial station along the maritime trade route connecting the western and eastern Aegean. According to E. Schofield, the disappearance of Akrotiri had a significant impact especially on eastern Cretan centres (Schofield 1982, 11). The latter may have had important relationships with Kos during LBA IA, as is

suggested by the results of macroscopic analysis of Minoan ceramic imports from the ‘Serraglio’ (see above). The Santorini eruption may have had an important emotional impact on the inhabitants of the Dodecanesian islands, as the Theran tephra from the volcanic explosion reached the region, covering the streets of the ‘Serraglio’ on Kos and Trianda on Rhodes (Marketou 1990a, 103–105).

In addition to Minoan ceramic imports, Morricone’s excavations at the ‘Serraglio’ also brought to light six imported Minoan-type stone lamps (Morricone 1975, 212, 273–274, figs. 127:a, 229). Only one specimen comes from a closely datable context and can be attributed to LBA IB (Vitale 2006, 79, fig. 6). The other lamps can be assigned stylistically between LBA IA Mature and LBA IB (for Minoan stone lamps, see Warren 1969, 49–60).

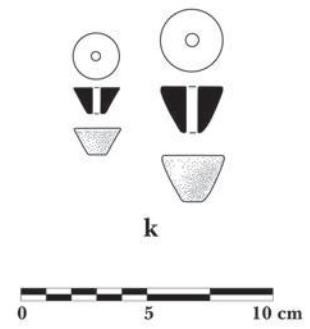
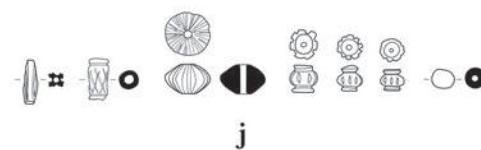
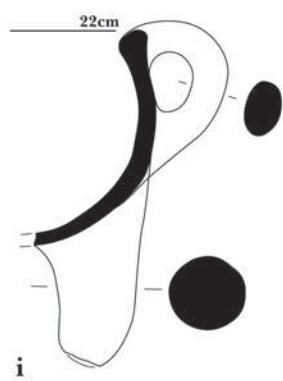
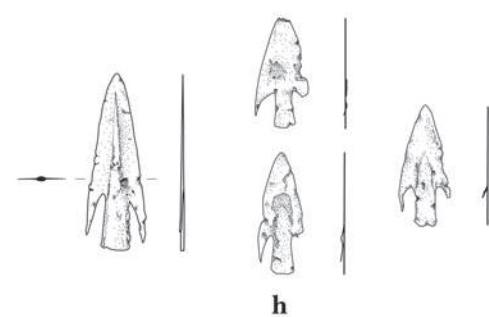
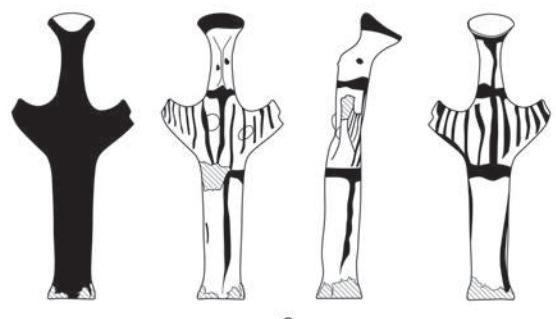
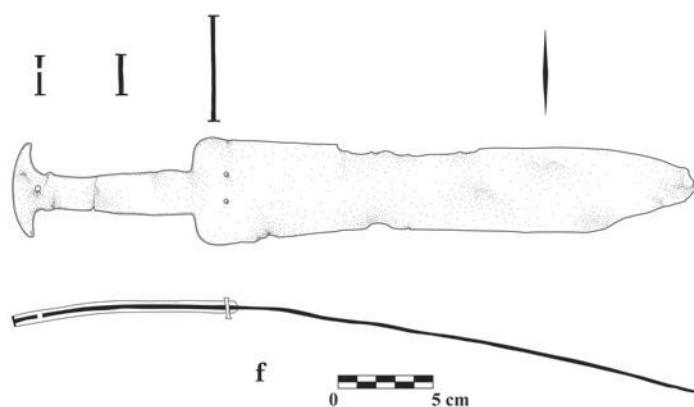
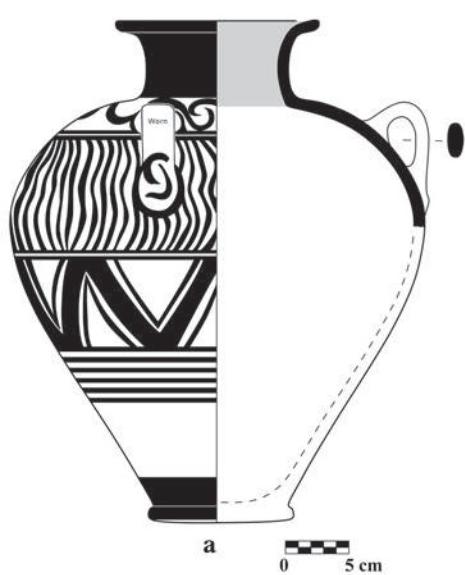
As far as Koan LBA IB architecture is concerned, Morricone’s excavations do not provide us with much valuable information. According to Marketou’s excavations, however, the inhabitants of the ‘Serraglio’ reorganised their town after an earthquake at the end of LBA IA Mature and the subsequent Theran tephra fall, probably following the previous town plan (Marketou 1990a, 103).

### **City II: LBA II–LBA IIIA1**

This phase is characterised by three elements of major significance: the construction of the chamber tomb cemetery of Eleona (Morricone 1967, 34–35, 55–57, 69–72, figs. 7–8, 26–28, 42–43; Mountjoy 1999, 1077), the evident increase of Mycenaean ceramic imports (Fig. 5.2:b), and the establishment on a larger scale of the local production of Mycenaean pottery (Table 5.3; Fig. 5.2:c). The existence of the cemetery is particularly important, as it implies the introduction of Mycenaean architecture, funerary practices, burial offerings, and rites. The majority of the ceramics from the patchy excavations at the ‘Serraglio’, however, still belong to local tradition classes, such as MR, MD, UPF, UPMC, and UPC pottery (Vitale 2006, 81–82, figs. 9–11; Vitale and Trecarichi 2015, 320, table 3).

The production of PMC-C LoD/DoL pottery ended during LBA IIIA1, when the latest specimens reached Rhodes and possibly Kea, travelling along the usual routes toward the west (Vitale and Hancock Vitale 2010, 75, with previous bibliography).

Fig. 5.2 (opposite) a. LBA IB: Locally produced Mycenaean piriform jar FS 21, ‘Serraglio’, no. 1218; b. LBA IIIA1: Imported Mycenaean piriform jar FS 44, Eleona Tomb 17, no. 367; c. LBA IIIA1: Locally produced Mycenaean goblet FS 255, ‘Serraglio’; d. LH IIIB2: Imported Mycenaean pegtop rhyton FS 201, Langada Tomb 51, no. 202; e. LH IIIC, Phase 4: Locally produced Psi figurine, Langada Tomb 57, no. 224; f. LH IIIB2: F 2:A type bronze sword, Asklepieion area; g. LH IIIB2: Bronze knife, Asklepieion area; h. LH IIIA2–LH IIIC, Phase 4: Stray bronze arrowheads, Langada; i. LH IIIA2–LH IIIB1: Locally produced Mycenaean tripod cooking pot FS 320, ‘Serraglio’; j. LH IIIA2: Faience and glass necklace, Langada Tomb 38; k. LH IIIB: Steatite spindle whorls/buttons, Eleona Tomb 19 (a: S. Regio, M. Rossin and T. Ross; b: M. Rossin and A. Trecarichi; c–e, g–h, j: M. Rossin and T. Ross; f, i: S. Regio and T. Ross; k: M. Rossin, A. Trecarichi and T. Ross).



### Cities III and IV: LH IIIA2–LH IIIB and LH IIIC

City III, dating from LH IIIA2 to LH IIIB, and City IV, dating to LH IIIC Phases 1–4, correspond to a long time span of approximately 300 years (Mountjoy 1999, 17, table 1, with previous bibliography; for the chronology and terminology of the LH IIIC period, see Rutter 1977; 1978). They also encompass different political situations, such as the Palatial and Postpalatial phases of Mycenaean civilisation. However, despite the risk of oversimplification, they are treated together here, because they present a significant number of homogeneous characteristics in relation to the subject of this paper.

During these phases, Mycenaean material culture became largely predominant at the ‘Serraglio’ and in its surrounding area. Attested Mycenaean diacritics include: (a) Mycenaean cultic/ritual practices, as is testified by the occurrence of special vases (Fig. 5.2:d),<sup>6</sup> anthropomorphic (Fig. 5.2:e), zoomorphic, and throne figurines;<sup>7</sup> (b) Mycenaean mortuary behaviours and rites at the cemeteries of Eleona and Langada, including evidence for libation (Georgiadis 2003, 82–83) and ‘killed’ weapons (Morricone 1967, 136, fig. 122); (c) Mycenaean settlement and funerary architecture, such as a fortification wall at Amaniou-Palaioyli,<sup>8</sup> two tholos tombs at Giorgaras and Thalassinos (Skeriou 1996; 1997), and the chamber tombs at Eleona, Langada, and Kastello;<sup>9</sup> (d) Mycenaean weapons, including swords (Fig. 5.2:f), knives (Fig. 5.2:g), spearheads, arrowheads (Fig. 5.2:h), etc. (Georgiadis 2003, 234–237, Appendix D.4); (e) all functional categories of locally produced and imported Mycenaean pottery, including drinking/eating, pouring, utilitarian, storage, and cooking vessels (Table 5.3; Fig. 5.2:i; Mountjoy 1999, 1085–1125, figs. 443–461, with bibliography); (f) Mycenaean jewellery from Eleona and Langada (Fig. 5.2:j–k; Georgiadis 2003, 234–237, Appendix D.4); (g) Mycenaean weaving equipment, including loom-weights and spindle whorls (Fig. 5.2:k; Georgiadis 2003, 234–237, Appendix D.4);<sup>10</sup> (h) Mycenaean iconography on pictorial vases, especially amphoroid kraters FS 56 (Fig. 5.3:a) and ring-based kraters FS 281/282 (Morricone 1975, 189–190, 358–368, no. 1190, figs. 73, 356–365); and (i) Mycenaean bronze tools, including knives, chisels, double axes, razors, cleavers (Fig. 5.3:b), tongs, a saw (Fig. 5.3:c), and an ear-scoop.<sup>11</sup>

During the phases from LH IIIA2 to LH IIIC, three new

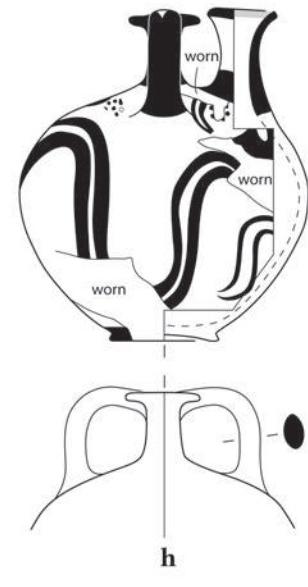
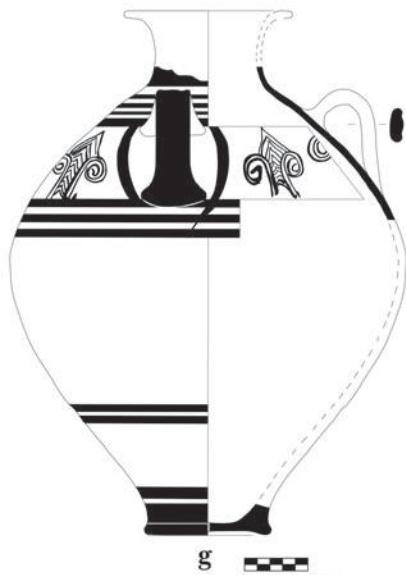
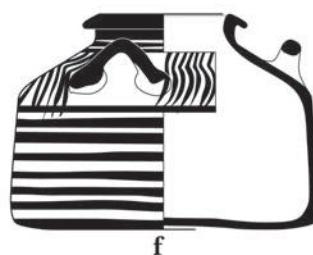
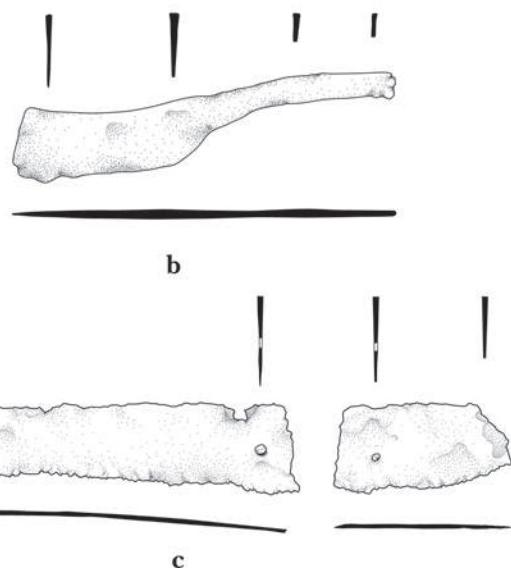
ceramic classes, which may be assigned to the Koan local tradition, appear (Table 5.3): Monochrome Grey (MG; LH IIIA2 only), Monochrome Black (MB; LH IIIB–LH IIIC), and Unpainted Grey pottery (UG; LH IIIA2–LH IIIC). All of the previously attested classes of the local tradition continue to be manufactured (Vitale 2006, 87, fig. 14:b; Vitale and Trecarichi 2015, 320, table 3).

Despite the long period of coexistence, interaction and cultural entanglement between Mycenaean and the local ceramics were relatively limited (Vitale and Trecarichi 2015, 329–332). The most significant cases include: (a) the presence of some shapes that were regularly produced in both traditions, such as the flask (Fig. 5.3:d) and the feeding bottle; (b) the occurrence of ‘concave-sided cups’ (Fig. 5.3:e), a type which may be considered reminiscent of Mycenaean carinated cups FS 230;<sup>12</sup> (c) the relatively frequent presence of Mycenaean vessels with monochrome painted exterior bottoms;<sup>13</sup> and (d) the fact that some of the locally made Mycenaean closed containers may have had a more pronounced biconical profile (Fig. 5.3:g, i) compared to their standard mainland prototypes.

Differences also emerge in significant aspects of the manufacturing process. Some of the local tradition vases were still fully handmade during the later part of the LBA, while contemporary Mycenaean vessels were almost always wheel-fashioned. Mycenaean vases were usually self-slipped or polished, while local tradition vessels were regularly burnished or wiped. The fact that the repertoire of shapes was rather different suggests that local tradition and Mycenaean ceramics covered diverse specific functions (Vitale and Trecarichi 2015, 331–332).

Contacts between the ‘Serraglio’ and Crete are documented by a continuous series of ceramic imports (Fig. 5.3:f, h; Mountjoy 1999, 1087, 1002–1003, 1116, nos. 21, 84–86, figs. 443, 450–451). As shown by P. A. Mountjoy, several specific features of the Minoan repertoire were also incorporated within the production of Mycenaean pottery on Kos, representing a secondary, but important ingredient of the local style, especially during LH IIIA2 and LH IIIB.<sup>14</sup> A typical example is a piriform jar FS 35 from Langada Tomb 51, which was decorated with a framed band of net pattern FM 57 and solid triangles FM 61A (Fig. 5.3:i). The former motif has an obvious Minoan origin, but the latter may have been a Dodecanesian feature (Mountjoy 1999, 1085).

Fig. 5.3 (opposite) a. LH IIIC, Phase 4: Locally produced Mycenaean amphoroid krater FS 56, ‘Serraglio’, no. 1190; b. LH IIIB: Bronze cleaver, ‘Serraglio’; c. LH IIIA2–LH IIIC, Phase 4: Bronze saw, ‘Serraglio’; d. LH IIIA2: MB flask (cf. FS 190), Eleona Tomb 2, no. 300; e. LH IIIA2: MG concave-sided cup, Langada Tomb 38, no. 138; f. LH IIIA2: Imported Minoan alabastron, Eleona Tomb 18, no. 379; g. LH IIIC, Phases 1–3: Locally produced Mycenaean piriform jar FS 37, “Serraglio”, no. 1194; h. LH IIIC, Phase 4: Imported Minoan Octopus stirrup jar, Eleona Tomb 7, no. 330; i. LH IIIA2: Locally produced piriform jar FS 35 with Minoan stylistic traits, Langada Tomb 51, no. 208 (a, g–i: S. Regio, M. Rossin and T. Ross; b–c: S. Regio and T. Ross; d: S. Regio and A. Trecarichi; e: M. Rossin and A. Trecarichi; f: S. Regio, M. Rossin and A. Trecarichi).



0 5 10 cm

## Discussion of the Evidence

The peak in the presence of Minoan and Mycenaean features on Kos is represented by LBA IA Mature on the one hand, and the phases from LH IIIA2 to LH IIIC on the other.

During LBA IA Mature, Minoan diacritics include ceramic imports from Crete, a significant number of individual characteristics of PMC-C LoD/DoL pottery, MiUF conical cups, MiUMC utilitarian and cooking vessels, Cretan-type discoid loom-weights and, possibly, imported stone lamps.<sup>15</sup> In addition, Minoan stylistic architectural features also occur, such as orthostat constructions and a polythyron. The latter is provisionally considered here as a feature of Minoan origin, but this judgment is questioned by Marketou's recent excavations at Trianda, where a building with a polythyron and frescoes can be dated to a period corresponding to Middle Minoan (MM) IIA/MM IIB, that is before or contemporary to the earliest polythyra thus far found on Crete (Marketou, pers. comm.).

Minoan-type wall painting/iconography, cultic/ritual objects, jewellery, bronze tools, weapons, and scripts are absent and Minoan impact is not significant in terms of ceramic manufacture and construction techniques. On the whole, the material culture of the 'Serraglio' during LBA IA Mature retains a local character and, as in the case of Iasos, the degree of Minoanisation is low when compared to other important sites in the Aegean, such as Kythera, Ayia Irini, Phylakopi, Akrotiri, Rhodes, and Miletus (Table 5.4; see also Gorogianni this volume, Abell and Hilditch this volume; Cutler this volume; Earle this volume; Raymond *et al.* this volume).

These data suggest that during LBA IA Mature Kos was not under any form of Minoan political control. The 'Serraglio' cannot be interpreted as a 'settlement colony', since the area of the site was continuously occupied from EBA 3A up until LH IIIC. Nor can it be seen as a 'governed colony', as there is no evidence proving the character of an administrative system. Finally, while the presence of some Cretan residents is possibly but not necessarily suggested by the occurrence of discoid loom-weights, conical cups, fireboxes, and cooking tripods, no Minoan enclave within the settlement has been found to support the existence of a 'community colony' (for the definition of Minoan 'settlement', 'governed', and 'community' colonies, see Branigan 1981), despite the comparatively large area investigated (Morricone 1975, 152, 389, fig. 7).

In the moment of the most dynamic expansion of the Cretan palaces, the appearance of Minoan stylistic features in Koan architecture and on fine drinking vessels may have represented the attempt of local elites to underline their status by an assertive display of prestigious exotics. The occurrence of conical cups, fireboxes, tripod cooking pots, discoid loom-weights, and stone lamps may have reflected the wish of Koan inhabitants to take part in Minoan-type

social practices, as recently suggested by C. Knappett and J. Hilditch with specific reference to the occurrence of conical cups outside of Crete (Knappett and Hilditch 2015; see also Wiener 2011, 364). In turn, the production of PMC-C LoD/DoL pottery can be seen as an effective strategy to compete along the maritime trade routes of the Aegean, as is proven by the distribution of this class outside the 'Serraglio', where Koan products were exchanged from the island of Aegina to the coastal centres of Asia Minor and Cyprus (Vitale and Hancock Vitale 2010, 76, note 128, fig. 1:1; 2013, 55, note 20, fig. 4:1.a; both with previous bibliography).

A similar picture accords well with the scenario of interactions and exchange proposed by J. L. Davis and E. Gorogianni for the Aegean in the Neopalatial period (Davis and Gorogianni 2008). In the context of what the authors describe as a 'new environment', the settlement of the 'Serraglio' may have represented one of the southeast 'stepping stones' in the trading routes connecting Crete with the southwest Anatolian coast at the beginning of the early LBA period (Davis and Gorogianni 2008, 385).

The introduction of Minoan cultural elements at the 'Serraglio' cannot be described as the result of a form of 'colonialism without colonies'. The Koan situation is different from that described by Knappett and I. Nikolakopoulou for MM IIIA Akrotiri in a recent important contribution (Knappett and Nikolakopoulou 2008), because no local imitation of Minoan decorated fine pottery exists at the 'Serraglio' and Cretan imports are less widespread than those at Thera. Furthermore, the word 'colony' and its derivatives, as applied to the Minoan and Mycenaean world, are problematic terms and their use has the potential of being misleading (see below).

During the phases from LH IIIA2 to LH IIIC, with the exception of language and the so-called 'wanax ideology', all of the diacritics recently listed by B. Feuer as characteristic of Mycenaean identity are documented in Koan material culture (Feuer 2011, 512–514). The evidence for Mycenaean cultic objects, funerary practices, and rites is particularly significant. No comparable adoption of such distinctive markers is documented during the period of Minoan influence on the island, although it must be underlined that no cemetery dating to the LBA IA phase has been excavated thus far in the area surrounding the 'Serraglio'.

The impact of Mycenaean culture also played an important role in terms of technology, as is suggested by the local production of all functional classes of Mycenaean pottery and the use of specific bronze working tools. Concerning the latter, the occurrence of a pair of tongs from Langada Tomb 11 (dating to LH IIIC Phases 1–4; Morricone 1967, 111–114, figs. 92–95) is particularly significant, because it suggests that Mycenaean-type metallurgical activity occurred in the vicinity. This conclusion is likewise supported by two similar stray tongs from the 'Serraglio'

Table 5.4 Minoan Features in the Southwest Anatolia, the Dodecanese, the Cyclades, and Kythera During the LBA IA Mature Period

Sites/ features	General picture	Pottery		Manufacturing techniques	Architecture	Frescoes	Rituals/religion	Linear A	Weaving equipment
	Weak pre- sence of local non- Minoan features according to excava- tors	Close imitation/ local production of Minoan decorated pottery	Stylistic features		(Ashlar masonry, polythyra, fortifications, hydraulic systems, etc)		Cultic items/ buildings	Burial practices	
<i>Southwestern Anatolia</i>									
Miletus	*	—	*	*	*	*	*	*	*
Iasos	—	*	*	*	—	—	?	—	*
<i>The Dodecanese</i>									
Kos: “Serraglio”	—	—	*	—	*	—	—	?	—
Rhodes: Trianda	—	*	*	*	*	*	*	—	—
<i>The Cyclades and Kythera</i>									
Melos: Phylakopi	—	*	*	*	*	*	?	*	*
Keos: A. Irini; Trollos	—	*	*	*	*	*	*	?	*
Thera: Akrotiri	—	*	*	*	*	*	*	?	*
Kythera: Kastri	*	*	*	*	*	—	*	*	*

Sources: Vitale and Hancock Vitale 2010, 71, table 3; 2013, 54, table 4.3 (with previous bibliography).

(Morricone 1975, 173, 279, figs. 54, 234). Additional evidence for the occurrence of metallurgical activity in the area of the ‘Serraglio’ is provided by a piece of bronze casting waste from Eleona Tomb 20 (LH IIIB to LH IIIC Phase 4; Morricone 1967, 74).

These data support the conclusion that, during the phases from LH IIIA2 to LH IIIC, a significant part of the Koan community was composed of peoples who considered themselves Mycenaeans and were presumably perceived as Mycenaeans by their neighbours. The process of Mycenaeanisation of the island may have taken place during LBA II and LBA IIIA1, when the presence of an initial nucleus of Mycenaeans is suggested by the first chamber tombs at Eleona and the beginning of the large-scale local production of Mycenaean pottery (Benzi 1996, 948–950; Vitale and Hancock Vitale 2010, 76; Vitale and Trecarichi 2015, 329).

It would not be safe to question these conclusions based on the absence of positive evidence for Mycenaean language and ‘wanax ideology’ on Kos. These two diacritics are documented only in the archaeological record of the Palatial sites of the Greek mainland and at Knossos on Crete. As a result, using such an argument one could paradoxically

exclude the presence of Mycenaeans not only from Kos, but also from the vast majority of the LBA non-Palatial sites in the core area of the Mycenaean world. In fact, the Dodecanese and Kos must have played an important role in the Ahhiyawa kingdom (Benzi 1996, 967–969; 2002; Mountjoy 1998, 50–51; Hope Simpson 2003, 223–231, 236–237; Vitale 2012b, 412–413; all with previous bibliography). This element might indirectly suggest a level of participation by the inhabitants of the ‘Serraglio’ in the ‘wanax ideology’ and the possibility that some of the members of the Koan community may have used Mycenaean Greek. This idea, however, is admittedly a speculative one and cannot be proved based on the currently available evidence.

### Concluding Remarks

The evidence presented above indicates that the quantitative and qualitative impact of Minoan and Mycenaean cultural diacritics on Kos were different. The former process was characterised by a stronger degree of cultural entanglement and ideological exchange with Koan established local traditions, while the latter was more pervasive and included

more significant cultural markers.

Minoanisation on Kos was a relatively brief phenomenon. Its development may have been blocked by some of the major events which occurred in the Aegean between the end of LBA IA and the beginning of LBA II, such as the Santorini eruption, the destruction and final abandonment of all of the Minoan palaces (except for Knossos), and the likely Mycenaean conquest of Crete (see, for example, Hallager 2010, 155–156). By contrast, Mycenaeanisation was a much longer process and resulted in the creation of a Mycenaean identity on Kos.

Concluding this analysis, four potentially significant points for future research on the subject of this paper should be briefly mentioned. First, although progress has been made in comprehending Minoanisation and Mycenaeanisation in the southeast Aegean and southwest Anatolia (Wiener 1984; 1990; 2011, 364; Benzi 1984; 1992; 1993; 1996; 2002; 2005; 2009; 2011; Melas 1988a; 1988b; 1991; Mountjoy 1998; Niemeier 1998; 1999; 2005; 2009; Niemeier and Niemeier 1999; Raymond 2001; 2005; 2007; 2009; Hope Simpson 2003; Kaiser 2005; 2009; Girella 2005; Momigliano 2005; 2009; Marketou 1998; 2009; 2010a; 2010b; Vitale 2012a; Vitale and Hancock Vitale 2010; 2013; Vitale and Trecarichi 2015), a full understanding of these phenomena will not be possible until our knowledge of the region during the Early and MBA is more analytically defined.<sup>16</sup>

Second, there is an increasingly strong need to explore the opposite direction of the cultural entanglements between Minoan and Mycenaean cultures and the southeast Aegean/southwest Anatolian interface. For example, it is difficult to believe that the wide circulation of PMC-C LoD/DoL pottery did not have any effect on the local ceramic productions of the western Cyclades and/or Crete, where this class was imported in comparatively significant quantities during LBA I.

Third, future investigation on the evidence for the expansion overseas of Minoan and Mycenaean material cultures and/or peoples would probably benefit from the abandonment of the term ‘colony’. This Latin-rooted word has the potential of evoking anachronistic ideas, based on modern examples in European history from the 15th to the 20th century AD.<sup>17</sup> This problem becomes even more important when derivatives of the word colony, such as ‘colonial’ and ‘colonialism’ (Branigan 1981; Knappett and Nikolakopoulou 2008; Knappett and Hilditch 2015), are introduced, as they clearly refer to concepts that are unparalleled in the ancient world.<sup>18</sup> A possible alternative would be to use the original Greek term ‘*apoikia*’, which literally means a ‘home away from home’.<sup>19</sup> *Apoikiai* were new settlements founded overseas. They represented a new community in its own right with its own territory and, possibly, its own set of laws (Whitley 2001, 124). In addition to avoiding the potential confusion caused by anachronistic ideas, this term has another major advantage:

it does not imply the notion that a ‘Minoan or Mycenaean colony’ must have been politically dependent on a specific mother city. In fact, in contrast with Roman and modern European colonies, Greek ‘*apoikiai*’ maintained cultural and identity ties with the mother city, but were not usually under any form of direct control (Whitley 2001, 124–125, with previous bibliography).

Another word that the Greeks used to designate their new settlements overseas and that may be relevant for the investigation of the expansion of Minoan and Mycenaean material cultures and/or peoples is ‘*emporion*’. In contrast with *apoikiai*, *emporia* did not have the status of autonomous *poleis* with their own territory and laws, but were rather considered as informal commercial posts founded mostly, if not exclusively, for trading purposes. They did not necessarily have a mother city and, if they did, they were not politically dependent on it. Because of their cosmopolitan character, *emporia* could have been ideal places of cultural entanglement.<sup>20</sup>

Fourth, the criticism of the ‘colonial’ approach emphasises the need for alternative interpretative frameworks. The list of options is long and intriguing. A good summary of potential candidates, including ‘hybridisation’, ‘creolisation’, ‘entanglement’, and ‘transculturalism’, has been discussed recently by L. A. Hitchcock and A. M. Maeir in their study of the emergence of Philistine culture (Hitchcock and Maeir 2013, with previous bibliography).

Consideration of the above four points may eventually lead to a move beyond the terms Minoanisation and Mycenaeanisation. These convenient labels represent a step forward from expressions such as ‘colonisation’ and ‘thalassocracy’. However, especially in the case of Minoanisation, they fail to portray the fluidity and complexity of cultural interactions in their actual working progress (Broodbank 2004, 54; Davis and Gorogianni 2008, 34, note 1). By contrast, they implicitly suggest the existence of hierarchically oriented and comparatively uniform processes that move from a superior centre to a more or less passive periphery. Consensus on an alternative definition of these phenomena, with a stronger emphasis on the multidirectional dimension of cultural entanglements between Crete, the Greek mainland, and the rest of the Aegean, would certainly represent a step forward and would be highly desirable in the future.

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### Notes

- 1 For the occurrence of these characteristics during the EBA, see Morricone 1975, 265, 268, nos. 1269, 1272, figs. 213:b, 219:a; Vitale 2013, 54–55, table 3, figs. 4–7. For the LBA, see Vitale and Hancock Vitale 2010, 70; 2013, 52; Vitale and Trecarichi 2015.
- 2 In the present and the following sections of this paper, the discussion of ceramic fabrics, bronze tools, and weaving equipment is based on collaborative analysis with J. E. Morrison, N. G. Blackwell, and E. Ballan.
- 3 The expressions ‘entangled objects’ and ‘cultural entanglement’ were recently introduced by P. Stockhammer in the context of Aegean archaeology, starting from a well thought-out criticism of terms such as ‘hybrid’, ‘hybridity’, and ‘hybridisation’ (Stockhammer 2012a, 43; 2012b, 89–90). As observed by Stockhammer, the whole world is ‘completely entangled’ and thus every culture should be perceived as ‘trans-cultural’. By contrast, the word ‘hybrid’ and its derivatives imply the existence of ‘the pure’ and/or of ‘purity’. The terms entangled objects and cultural entanglement were previously used in other archaeological contexts by N. Thomas, M. Dietler, and I. Hodder to describe various aspects of human-thing-relationships (Thomas 1991; Dietler 1998; Hodder 2011a; 2011b).
- 4 PF and PMC-C LoD/DoL pottery were previously called ‘Fine Pattern-Painted’ and ‘Medium-Coarse to Coarse Pattern-Painted’. For a definition of these two ceramic classes, see Vitale and Hancock Vitale 2010, 66–67, table 2; 2013, 47, table 2; both with previous bibliography.
- 5 MR was previously called ‘Monochrome Red Burnished’. For a complete definition of this ceramic class, see Vitale and Hancock Vitale 2010, 66–68, table 2; 2013, 47, table 2; Vitale and Trecarichi 2015, 313–315, table 1.
- 6 For ritual vessels see, for example, Morricone 1967, 183–186, no. 151 (FS 157, strainer jug), 187–188, no. 147 (FS 196, ring vase), 230–231, no. 202 (FS 201, pegtop rhyton), 235, no. 205 (FS 155, strainer jug).
- 7 Zoomorphic and throne figurines are currently unpublished. For anthropomorphic figurines, see Morricone 1967, 127–128, 233, 249, nos. 59, 215, 224, fig. 111:a, d, figs. 256, 275.
- 8 The construction technique of the fortification wall at Amaniou-Palaiopyli is considered cyclopean by R. Hope Simpson (1981, 201, pl. 30b). This attribution is rejected by D. Field (1984, 201–202), but there is consensus on the Mycenaean character of the structure.
- 9 The chamber tomb cemeteries of Eleona and Langada were founded in LH IIIB and LH IIIA2 respectively and were used until LH IIIC Phase 4 (Morricone 1967; Mountjoy 1999, 1077–1081; Vitale 2012a, 1237–1238, table 2; 2012b, 408). The chamber tomb at Kastello can be dated to LH IIIB (Papazoglou 1981).
- 10 These objects may have been used either as buttons or as spindle whorls (see Vitale 2012b, 409, note 18).
- 11 For the Asklepieion area and the ‘Serraglio’, see Morricone 1975, 255, 261, 276–279, figs. 200:a, 201, 205:c, e, 208–209, 232–239; for Eleona and Langada, see Georgiadis 2003, 234–237, Appendix D.4. A large number of the bronze implements in SELAP's study collection are stray finds. All of those that can be dated by context, however, may be assigned to the phases from LH IIIA2 to LH IIIC. It is interesting to note that, according to the results of a preliminary analysis of these materials by Blackwell, none of the Koan bronze tools from Morricone's excavations can be classified, from a typological point of view, as primarily Minoan in origin.
- 12 Despite the occurrence of similarities, Koan concave-sided cups cannot be equated with true Mycenaean carinated cups FS 230 (Furumark 1941a, 624). In fact, at least four significant differences may be noted: (a) the handle of the Koan examples extends from rim to base, while the handles of Mycenaean specimens normally extend from rim to side; (b) Koan cups tend to have flat bases, while Mycenaean cups usually have ring bases; (c) Koan cups have a shallower body shape than Mycenaean cups, due to the more even proportion between their height and maximum diameter; and (d) last, but not least, all of the Koan cups have concave sides, but only some have carinated body profiles. For a different point of view, see Benzi 1996, 956.
- 13 Monochrome painted bottom bases are frequently attested on early LBA vessels of the local tradition (see Vitale 2006, 79, 81–82, nos. 1202, 1230, 1232, 1237, figs. 5, 7:a, 9:a, 11).
- 14 Mountjoy has shown that Koan locally produced Mycenaean fine ceramics were part of a distinctive Dodecanesian regional style during LH IIIA2 and the so-called East Aegean Koine during LH IIIC (Mountjoy 1998, 37–45, 53–63; 1999, 31, 45, 50–51). However, there can be no doubt that the main developments follow the mainstream styles of the Greek mainland.
- 15 For a thorough discussion of the significance of the Koan storage, utilitarian, and cooking vessels, see Vitale and Morrison forthcoming.
- 16 For recent contributions to our knowledge of the Early and MBA in the Dodecanese, see Marketou 2010a; 2010b; Vitale 2013 (all with previous bibliography).
- 17 In this respect, it is interesting to notice that the majority of the examples cited by K. Branigan to illustrate his models of ‘settlement’, ‘governed’, and ‘community colonies’ date to the modern era or that, in any case, only a comparatively small fraction of them include ancient Greek ‘colonies’ (Branigan 1981, 25–27).
- 18 For the potential risks of anachronism in the use of the term colony as applied to the ancient Greek world, see Finley and Lepore 2000, 29; Greco 2006, 169.
- 19 A similar point of view is proposed by Finley and Lepore

- in relation to the so-called Greek ‘colonies’ of the historical period, from the 8th century BC onward (Finley and Lepore 2000, especially 29–37).
- 20 In reality, the distinction between an *apoikia* and an *emporion* was not always clear cut. Several settlements began as an *emporion* and became *poleis* in their own right at a later stage (Whitley 2001, 124). This fact obviously implies that it can be rather difficult to tell *emporia* from *apoikiae* in the archaeological record. For a thorough criticism of the term colony and an in-depth consideration of the terms *apoikia* and *emporion*, as far as Minoan and Mycenaean civilisations are concerned, see Vitale forthcoming.

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## MELOS IN THE MIDDLE: MINOANISATION AND MYCENAEANISATION AT LATE BRONZE AGE PHYLAKOPI

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### Introduction

Foreign cultural influences are clearly visible among the excavated remains of the Late Bronze Age (LBA) town at Phylakopi on the Cycladic island of Melos (Figs. 6.1 and 6.2). Not only were Minoan and Mycenaean items imported from Crete and the Greek mainland, respectively, but some objects of local manufacture were made in imitation of Minoan and Mycenaean prototypes. Consequently, the community at Phylakopi is often said by archaeologists to have been ‘Minoanised’ and then ‘Mycenaeanised’. When applied, however, these terms often are defined vaguely and rarely are the ‘Minoan’ and ‘Mycenaean’ elements carefully dissected. Since Minoanisation and Mycenaeanisation have been used to describe varying situations at diverse sites throughout the Aegean, it is worth asking what exactly they mean in this particular case, and how these two phenomena compare with one another at Phylakopi.

‘Minoanisation’, as Broodbank (2004, 46) has defined it, “is a modern term of sometimes deceptive convenience for a heterogeneous range of ancient material culture traits and practices that indicate the adoption in places beyond Crete, through whatever means, of ways of doing things that originated directly or indirectly within that island”. This phenomenon has traditionally been ascribed to the time of the Cretan Old and New Palaces (MM IB–LM IB, c. 2000–1450 BC). ‘Mycenaeanisation’ can be defined similarly, but with the epicentre on the southern Greek mainland and the timeframe typically limited to that of the Mycenaean palaces (LH IIIA–B, c. 1425–1200 BC). These archaeological phenomena are largely about things and the practices they materialise. Pottery styles, cooking habits, writing, weight systems, weaving, wall paintings, architecture, burial practices, and cult objects are all potential indicators. As the other chapters in this volume

show, great variety exists among the LBA communities described as having been Minoanised or Mycenaeanised. In other words, Minoanisation may be characterised by traits A, B, and C at one site and by traits X, Y, and Z at another. A critical aspect of both phenomena is their core–periphery structure, wherein the material culture and social practices of the more powerful, wealthy, and complex palace-centred states on Crete and the Greek mainland were imported and imitated by (or imposed upon?) members of small polities in the Aegean. Recent works on Minoanisation (Davis and Gorogianni 2008) and Mycenaeanisation (Feuer 2011) have highlighted the largely elite nature of these phenomena and shown how social divisions such as class and gender could have a bearing on these cultural transformations.

To date, consideration of Minoanisation and Mycenaeanisation on Melos has focussed on their political significance, with scholars debating whether or not foreign things indicate the presence of foreign people, and if so, in what capacity they were present. A long line of scholarship has viewed these two phenomena as the results of colonisation and imperial annexation (e.g., Mackenzie 1904, 270–272; Furumark 1950, 200, 264; Scholes 1956, 38, 40; Barber 1974, 51, 53; 1984; 1999a; 1999b; Wiener 1984; 1990). Such interpretations are not implausible, given that warfare, conquest and foreign rule are well documented in the history of the Aegean. At best, however, only circumstantial cases may be made for Minoan or Mycenaean dominion on Melos since contemporary texts documenting conquest and rule are lacking – we have only the later Greek tradition of the Cretan king Minos’ thalassocracy (Hdt. 3.122.2; Thuc. 1.4, 1.8) and the vague Homeric account of Mycenae’s rule over many islands (Il. 2.108) – and since the identification of ethnic groups from archaeological evidence is extremely difficult (*cf.* Hall 1997; 2002; Jones 1997; Knapp 2001).

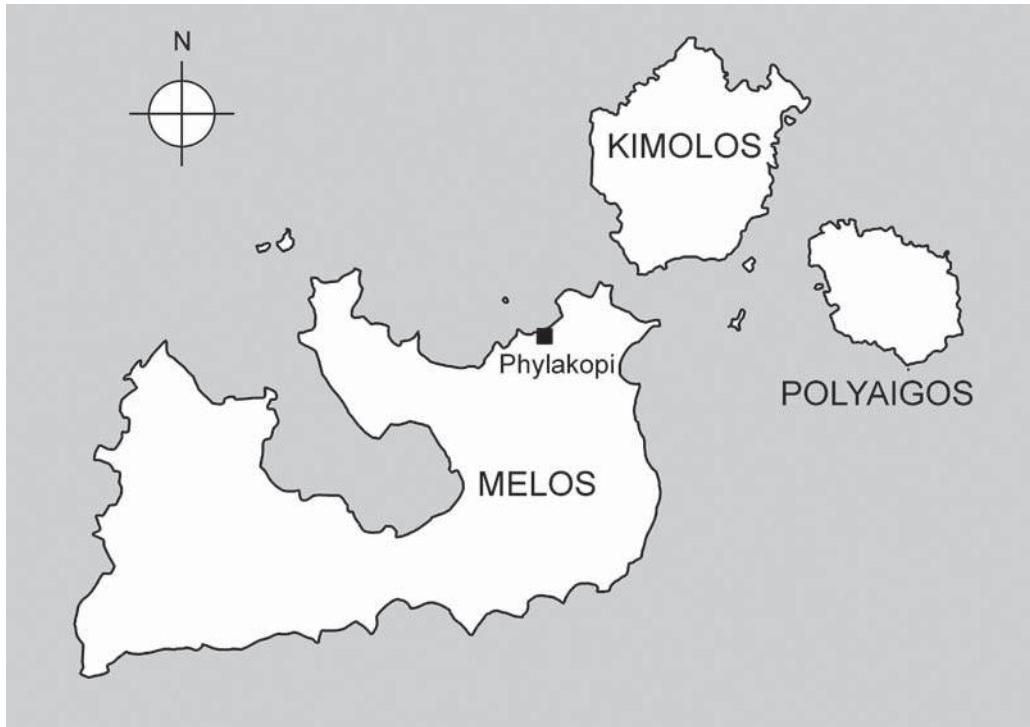


Fig. 6.1: Map of Melos.



Fig. 6.2: Plan of Phylakopi in the LBA (after Renfrew 2007, Fig. 2.1; Renfrew 1985, Fig. 3.1; Whitelaw 2005, Fig. 6).

Another vein of scholarship argues against imperialist narratives of Minoanisation and Mycenaeanisation, preferring instead to see these two phenomena as reflecting the peaceful presence of foreigners and/or the acculturative agency of indigenous Melians. Branigan (1981, 30–32), for instance, noted that Minoan rule was unlikely at Phylakopi due to the absence of a Minoan-style ruler's residence or garrison, and suggested that if a Minoan colony existed, it would have

been a diffuse ‘community colony’ of immigrants established primarily for trade purposes given the distribution of Minoan and Minoan-style objects throughout the town. Berg (2000; 2002) has illustrated technological distinctions between local Minoanising and traditional Cycladic pottery in late MC–LC II and argued that these divisions represent Melian resistance to Minoan culture and thus a degree of local autonomy. A complementary approach has been taken by

Whitelaw (2005, 60–61), who notes that the concentration of non-ceramic Minoan imports and Minoan-style features in a single building, the Pillar Rooms Complex, “points to the actively negotiated character of Minoanisation as a strategy, as well as … the recognition of different material strategies, potentially engaged in by different segments of the local population, for different reasons”. Likewise, Davis and Gorogianni (2008, 381–383) propose that Minoanising fashions were adopted on Melos (and elsewhere in the Aegean) because Minoan things and practices constituted the “cultural language of power”. Comparatively little has been written on the Mycenaeanisation of Melian culture but Schallin (1990; 1993; 1998) has argued that the Mycenaean features at Phylakopi were likely acquired or imitated by islanders for status enhancing purposes and do not reflect a Mycenaean colonial presence. She grounds her argument in observations of cultural continuity from earlier periods and Renfrew and Cherry’s (1986) model of peer polity interaction, which posits that objects, ideas, and practices were transmitted between neighbouring, autonomous political units via a range of interactions, including “warfare, competition, symbolic entrainment and an increased exchange” (Schallin 1993, 189).

It is clear from the continuing debate that neither interpretative camp has provided a definitive answer to the question of Melos’ political status in the LBA. How, then, do we move forward? By setting aside this contentious issue – I do not aim to know whether or not Melos was conquered and colonised – and renewing focus on the objects so often listed as evidence for Minoanisation and Mycenaeanisation in order to see what information may be gleaned regarding the incorporation of foreign things and practices into Melian culture.

While I am not concerned with conquest or colonisation, certain details of human mobility are fundamental to this study. First, coastal and insular communities in the Aegean were highly interconnected and maritime-oriented. As Horden and Purcell (2000) have shown with respect to historical antiquity, and as Broodbank (2000, 81–91; 2004, 67–68) has argued persuasively for prehistory, the geographic fragmentation, ecological diversity, and climatic variability of the Aegean basin promoted ties between communities. These ties ensured a safety net in the event of crop failure, surplus labour at times of stress in the agricultural calendar, aid in warfare, exogamous marriage partners, and access to raw materials and specialised products (*e.g.*, Melian obsidian). A wide range of individuals thus might have moved at some time, for some purpose. Indeed, LBA documents from the Aegean, Near East and Egypt document the movements of craftsmen, merchants, sailors, ambassadors, messengers, brides and grooms, hostages, slaves, priests, healers, bards, and mercenaries, often between royal courts (*e.g.*, Zaccagnini 1983; Cline 1995). We must consider an array of human actors operating

behind Minoanisation and Mycenaeanisation. Second, the distances travelled by sea could be substantial but such journeys most likely involved specialist seafarers and occurred less frequently than the habitual contacts with neighbouring communities (Tartaron 2013, 182–211). Network analyses by Broodbank (2000, 184, fig. 53, 345, table 12) and Knappett *et al.* (2008, 1014) suggest that most Melian connections in the Early and Middle Bronze Ages were with other Cycladic islanders. Given these logistical considerations, we must consider how often Melians are likely to have come into direct contact with Cretans or mainlanders and the extent to which Minoan and Mycenaean objects and practices may have been mediated by other islanders.

During the LBA, the southern Aegean, Melos included, may be envisioned as a place where individuals of diverse origins met and mixed over the short and long terms. In an environment such as this, the mingling of different peoples, things, practices and ideas could effectuate a reworking of the cultures involved and even result in the creation of a new ‘hybrid’ culture (*cf.* van Dommelen 1997; 1998; 2002; Voskos and Knapp 2008). How, then, do we analyse the cultural transformations characterised by Minoanisation and Mycenaeanisation on Melos? Many recent analyses of cultural transformations in the prehistoric Mediterranean, particularly those at the end of the LBA, have employed concepts developed in postcolonial studies, such as hybridity (*e.g.*, Voskos and Knapp 2008), transculturalism (Hitchcock 2011), and entanglement (Stockhammer 2012a; 2012b; 2013). While hybridity/hybridisation has been especially popular, I believe the concept is ill-suited for the present study given its associations with colonialism and subaltern resistance (the seminal study in this regard being Bhabha 1994). Neither transculturalism nor entanglement carries the political undertones of hybridity, but I favour the latter because of its well-developed methodology grounded in material culture studies and its elaboration specifically for application to prehistoric archaeology.

Stockhammer (2012a, 48–50) structures the process of entanglement into three overarching stages, beginning with the encounter of at least two etically defined entities, *e.g.*, archaeological cultures A and B. If an object of culture A is appropriated by an individual of culture B during or after this encounter, then the result is a state of *relational entanglement*. Relational entanglement is defined by a four-part process of appropriation in which an object simultaneously is made a personal possession (appropriation), is classified within local classification systems (objectivisation), is connected with certain practices (incorporation), and is attributed with a new meaning (transformation). Appropriation and incorporation refer to the object and may be discerned from archaeological contexts but objectivisation and transformation refer to perceptions that are difficult to reconstruct, although archaeological contexts may provide

clues (Stockhammer 2012a, 49). A third stage – *material entanglement* – is characterised by objects that combine “the familiar with the previously foreign” into something new (Stockhammer 2012a, 50).

Entanglement’s focus on the after-effects of an encounter and its distinctions between objects and practices, imports and imitations, makes it a helpful heuristic for parsing the cultural transformations we call Minoanisation and Mycenaeanisation. Unfortunately, many of the artefacts unearthed at Phylakopi by the early excavators (Atkinson *et al.* 1904; Dawkins and Droop 1911) resist the rigorous application of this methodology because they lack contextual information. A large part of the analysis presented here, therefore, is necessarily impressionistic. The material from Renfrew’s excavations in the mid-1970s (Renfrew 1985; 2007) and certain early finds, however, are well documented and so can be closely scrutinised. In the following sections contextual information regarding the salient evidence for Minoanisation and Mycenaeanisation on Melos – architecture, ceramics, cult objects, personal adornments and administration – is examined in order to gain insight into how objects were used and perceived. Moreover, consideration of how Minoanising and Mycenaeanising objects were made on Melos directs our attention to the transmission of knowledge and skills from one individual, and one culture, to another (*cf.* Broodbank 2004, 60–61). In order to discern changes in Melian culture over time, and to situate these changes vis-à-vis social, political and economic developments in the broader Aegean, this examination proceeds diachronically, with evidence presented and considered in turn for individual ceramic phases (*e.g.*, LC I, LC II, LC IIIA1), beginning with LC I and ending with LC IIIB (discussion of the LC IIIC or Post-palatial period cannot be accommodated here). The results are a much finer-grained analysis than has been attempted in previous studies of Minoanisation and Mycenaeanisation at Phylakopi. In conclusion, and in response to the central question of this book, the phenomena of Minoanisation and Mycenaeanisation on Melos are compared and shown to have shared certain traits but also to have differed in significant ways.

## The Archaeological Evidence

### *Late Cycladic I (c. 1625–1525 BC)*

The early excavators at Phylakopi identified a site-wide destruction around the MC/LC I transition, followed by a major rebuilding campaign (Mackenzie 1904, 263; but see Brodie 2009). A few deposits noted by the early excavators define the LC I phase, which they termed City III-i (Atkinson 1904, 28; Barber 1974, 5, 47, 51–53; 1981, 2, 6). A possible stratigraphic division between LC I and II was noted during

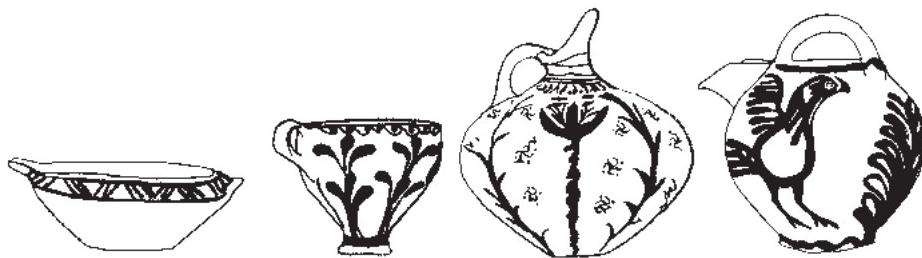
Renfrew’s excavations but only in Trench ΠS, where Floor 1 appears to mark the change from one ceramic phase to the next (Vitaliano and Vitaliano 2007, 87). Tephra particles from the volcanic eruption of Thera, which occurred late in LC I, have been found in soil samples from Phylakopi and constitute another possible chronological indicator (Vitaliano and Vitaliano 2007).

### Architecture

In general, the excavated LC I buildings reflect the local MC building tradition (Schallin 1993, 49–53). For example, the presumed administrative centre, the Mansion, poorly known as it is, betrays no obvious foreign debts (Renfrew *et al.* 2007, 32–36). A few possible Minoan architectural features are known, but come from insecure or secondary contexts in various locations: small ashlar blocks reused in the LC IIIA2 West Shrine (Renfrew 1985, 374); stray fresco fragments from the northern area and an ancient dump in the south (Morgan 2007, 389–396); and column bases in two separate buildings (Atkinson 1904, 60–61). Compared to these scattered finds, the Pillar Rooms Complex (PRC) is striking for its elaborate suite of Minoanising architectural features (subterranean rooms with pillars, column bases, hammer-dressed stone blocks, wall paintings) and contents (see below). Further distinguishing the PRC from other buildings in town are its impressive façade and large forecourt. While the construction date of the complex is debated – late MC (Whitelaw 2005, 51–61, following Mackenzie 1904, 260–262) or LC I (Renfrew *et al.* 2007, 52–53) – the PRC was clearly used during LC I and continued in use into LC II. The adoption of this particular Minoan architectural package – notably one associated with elite cult practices on Crete – and not other features (*e.g.*, lustral basins, polythyra, horns of consecration, ‘Minoan halls’) must have some significance, especially since pillar crypts are not otherwise attested outside of Crete. Inspiration, therefore, likely came directly from Crete. Gesell’s (1985, 26–29) observation that pillar crypts are concentrated in central Crete (primarily at Knossos) during this period permits the source to be defined more narrowly. The planning, building and decorating of the PRC implies the transmission of specialised knowledge and skills from, or import of, an architect, stone masons, plasterers, painters, and priests or priestesses, from Crete. Indeed, Brysbaert (2008) has suggested on the basis of technical studies that the frescoes in the PRC were the work of itinerant Cretan plasterers/painters. Close examination of the architecture and comparison with Cretan pillar crypts might prove equally enlightening.

### Ceramics

Ceramic imports from Crete and the Greek mainland appeared in small numbers at Phylakopi in the earlier Middle Bronze Age but toward the end of that period they became more numerous. LM IA sherds are often difficult to



*Fig. 6.3: Selection of late MC–LC I pottery: Melian bowl, panelled cup, and Black-and Red style jugs (after Edgar 1904b, figs. 88, 91, 97, 117).*

distinguish from LH I (Cherry and Davis 1982, 336–337, fig. 2), but Berg (2000, 136–137, Graph 6.12) has calculated that Minoan imports comprise 0.9% of the early/mid-LC I assemblage from Renfrew's excavations and that imports from the Greek mainland (both LH I-style and Minyan) comprise 0.5%. The Minoan imports are a mix of tablewares and storage vessels (for the range of shapes, see Mountjoy 2007, 323). No mention is made of possible sources on Crete. Among the recognizable LH I material, Vapheio cups are most common but a range of table and storage wares are present (Mountjoy 1999, 890; 2007, 325–326). Other mainland wares, such as Grey and Yellow Minyan, Matt-painted and Polychrome, are also known from LC I contexts. The Minyan sherds belong exclusively to drinking vessels, while the Matt-painted and polychrome sherds, which are far fewer in number, belong mainly to closed storage vessels (Dickinson 2007). Most mainland imports seem to be from the northeastern Peloponnese (Cherry and Davis 1982, 337, fig. 2; Davis and Cherry 1984, 149, fig. 1, no. 8), although other regions may be represented: for example, at least one Matt-painted vessel from the early excavations may be Boeotian (Graziadio 1998, 41; Dietz 1991, 302–303). Since the pottery from the early excavations was not rigorously classified and counted, and since little contextual information is known for the sherds recovered during Renfrew's excavations due to the small, ‘telephone-box’ size of his trenches, it is difficult to assess how Minoan and mainland imports were used and perceived at Phylakopi in LC I. The range of imported pottery, however, does have implications for understanding local imitations of Cretan and mainland vessels.

The Melian assemblage is primarily composed of various local or Cycladic wares, such as Later Local, Cycladic White, Purple Gritty, and Dark Red Micaceous (for definitions, see Vaughan and Williams 2007), and typified by vessels like the Melian bowl, panelled cup, and Black-and-Red Style jugs (Fig. 6.3). Comparison of shapes in the local tradition with Minoan imports reveals general duplication of shape (*e.g.*, cups, jugs, and jars) and function (*e.g.*, drinking, serving, storage), although certain Minoan shapes, such as the rhyton, conical cup, and tripod

cooking pot, may have implications for cultic, drinking, and cooking practices (*e.g.*, Koehl 2006; Wiener 2011; Knappett and Nikolakopoulou 2008; Morrison 2011). Analysis of manufacturing techniques, however, reveals significant differences. Cycladic shapes were traditionally formed by hand and only gradually came to be made with the aid of the potter's wheel. The wheel, which was introduced from Crete in the later Middle Bronze Age, was first used on Melos to produce a selection of Minoan-style vessels according to established Minoan manufacturing techniques (on the practical aspects of technical transmission, see Abell and Hilditch, this volume). The range of Minoan shapes and motifs produced on Melos gradually increased, as did the proportion of Minoanising vessels in the Melian assemblage. This rise correlated inversely with a decrease in the number of Cretan imports. These figures, together with the differentiation between Cycladic and Minoan shapes in terms of manufacturing method, led Berg (2000, 202; 2002, 187; cf. Davis and Cherry 1984; 1990) to argue that Melian potters were conservative in their response to Minoan ceramics. Expanding use of the wheel to produce vessels in the local tradition may reflect a gradual internalisation of this Minoan technology, whereby it slowly lost its ‘Minoan-ness’. How locally produced Minoanising pots were perceived at Phylakopi is not clear, but judging by the range of shapes and site-wide distribution, they do not appear to have been distinguished functionally from actual Minoan vessels.

As we have seen, Minoan pottery had a significant impact on Melian ceramic production in LC I. By contrast, imports from the Greek mainland had a negligible impact. Rare examples include the copying of high-quality Matt-painted Polychrome Ware decorative motifs, as can be seen in the use of framed red bands bordered by black (Davis and Cherry 2007, 304); a local imitation of a Grey Minyan goblet (Sherratt 2000, 241); and askoi of LH I inspiration (Edgar 1904b, 135 and Figs. 108–109; Barber 2008, 134). Such minimal Helladic influence is not surprising given that Minyan and Matt-painted wares had established counterparts in the Melian repertoire (dark slipped/burnished and matt-painted wares) and the Minoan basis of the LH I style.

## Cult Objects

Native cult practices at Phylakopi are not well understood. A bovid figure of the early MC period was found during the early excavations (Barber 1974, 13, Table 5F), and a few other MC examples were found during Renfrew's excavations, namely the leg of a bovid figure (SF 454) from the area of the later Megaron, the leg and partial body of an animal figure (SF 688), a probable equid figure (SF 687), and the prow of a small boat (SF 684); the last three objects all come from the same stratum in trench PLa (French 2007). French (2007, 440) notes that the large bovid figures find general parallels on Thera and Kea, as well as Crete, in the MBA. Of interest is an imported Middle Minoan Kamares Ware figurine found during the original excavations (Renfrew 1985, 376–377). Three fragments from Renfrew's excavations suggest that the MC coroplast tradition continued into LC I-II: an extremely worn, unusual head in local fabric (SF 986) and a possible animal leg with tooled surface (SF 991) come from the area just east of the PRC, and an arm from a large, painted human figure in local fabric (SF 2237) was found in the south-central sector of the site (French 2007).

As noted above, the PRC (Whitelaw 2005, 56–57) contained many objects with parallels in elite cultic contexts on Crete: *e.g.*, an early Neopalatial undecorated steatite lamp, a bovine rhyton, an ivory furniture attachment, five pierced pedestalled bowls, and vessels containing “scarlet earth” (for additional finds, see Hogarth 1904, 17–18). The pierced bowls recall the stone receptacles for liquid offerings known in pillar crypts at Knossos; vessels of pigment are known from the Pillar Crypt annex at Tylissos; and the bovine rhyton recalls the bull’s head rhyta common in Cretan pillar crypts. The style and iconography of the wall paintings recall examples from Crete and may depict scenes of mythical or ritual significance. A few plaster fragments from the complex may belong to portable offering tables of Minoan type (Morgan 2007, 372–389). While the use life of these objects is unclear (conceivably anytime between late MC and LC II), they nonetheless suggest that the PRC was a locus of Minoan-style ritual activities. At the same time, however, local idiosyncrasies, such as the absence of the double axes commonly found in Cretan pillar crypts (Gesell 1985, 26–29), are evident and suggest the alteration of typical Minoan practices to suit a Melian context.

Cultic finds of a Minoan nature are known from other areas at Phylakopi as well. From Renfrew's trenches PLa and KKd in the southern sector come two fragmentary offering tables of Minoan type (Cherry and Davis 2007, 406: SF 678 and 2118). These tables recall examples known from household shrines at Akrotiri on Thera (Marinatos 1984, 21–24) but their use at Phylakopi is unclear. Their association with rhyta and conical cups, *inter alia*, in the LC I layers (rhyta: Davis and Cherry 2007, cat. nos. 1781, 858, 708, 797, 836; conical cups: Renfrew *et al.* 2007, 57–58,

74) recalls the grouping of rhyta, cups and offering tables at Ayia Irini on Kea and Akrotiri on Thera noted by Koehl (2006, 360). Such assemblages do not appear on Crete and mark another departure from the Minoan norm in the Melian use of Minoan cult objects.

## Personal Adornment

There is little evidence regarding the ways in which individuals dressed and adorned themselves at Phylakopi during the early LBA. Intact burials are unknown, textiles, hairstyles, and make-up do not survive, and jewellery is rare. The available information consists of a fragmentary fresco, objects connected with the manufacture of textiles, and a few pins. Only a single bead (probably steatite, perhaps unfinished) is known and comes from a LC I-II context in trench PK (Cherry and Davis 2007, 424); none were recorded by the original excavators, and Dawkins and Droop (1911, 22) noted a few but did not provide descriptions or details of their contexts.

Fragments of a fresco depicting two women are known from the PRC and may belong to this period (Morgan 2007, 396–397). A seated woman who faces right wears a bodice that is either red or white with a red border, an elaborately patterned, possibly embroidered, skirt, and a thick, rolled belt with elaborate knot at back. On each of her wrists is a ribbed yellow (gold?) bracelet; she holds a blue cloth in her left hand. Another woman, who may be standing faces left. She is poorly preserved but a blue necklace with parallel black lines is visible; to judge by the loop knot and tassels at back, it may be of twisted ribbons rather than beads. The scene has iconographic and stylistic parallels on Thera and Crete, and the garments worn are arguably of Cretan type (Morgan 2007, 384–386; Cutler 2011, 241 n. 97). Given the placement of this fresco in a building that served, at least in part, a cultic function, it may be hypothesised that Minoan-style garments were worn by women in certain ritual contexts.

Two types of weaving may have been practiced at Phylakopi in LC I (Fig. 6.4). Terracotta spools, known mainly from MC and LC I contexts, are possibly associated with the horizontal ground loom and find comparanda on Kea and the Greek mainland; they are uncommon on Thera and Crete (Cherry and Davis 2007, 401–403; Bosanquet and Welch 1904, 213). Given the northward distribution of spools, we may posit that traditional Melian garments were made using weaving equipment and techniques similar to that employed by early Mycenaean Greeks. The horizontal ground loom would have been appropriate for making the plain robes with decorated bands at the seams or edges worn by women and men in later Mycenaean frescoes (Cutler this volume). The so-called Fishermen Vase in the late MC–LC I Black-and-Red style, found during the initial excavations at Phylakopi, provides a local example of such clothing: the four men depicted wear loin-cloths with frontal flap, two of which have embroidered borders (Edgar 1904b, 123–125).

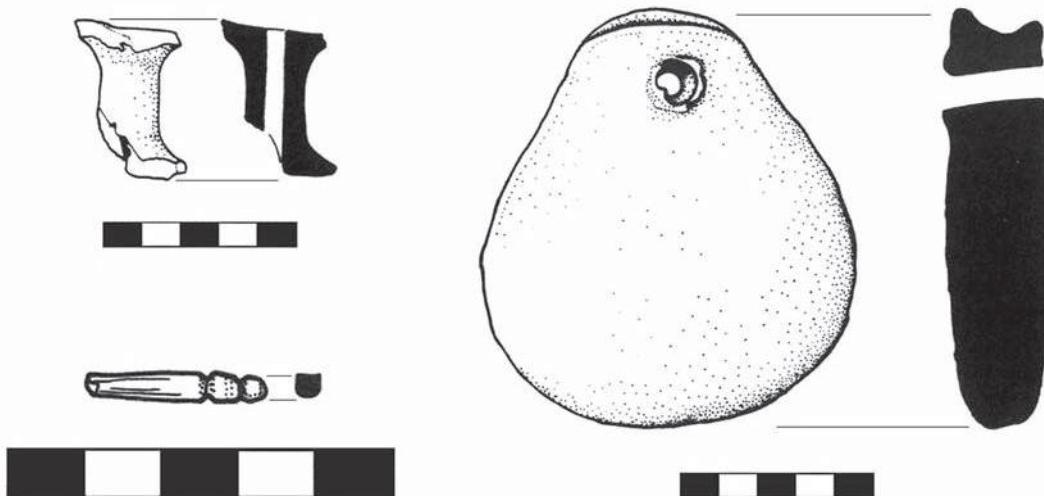


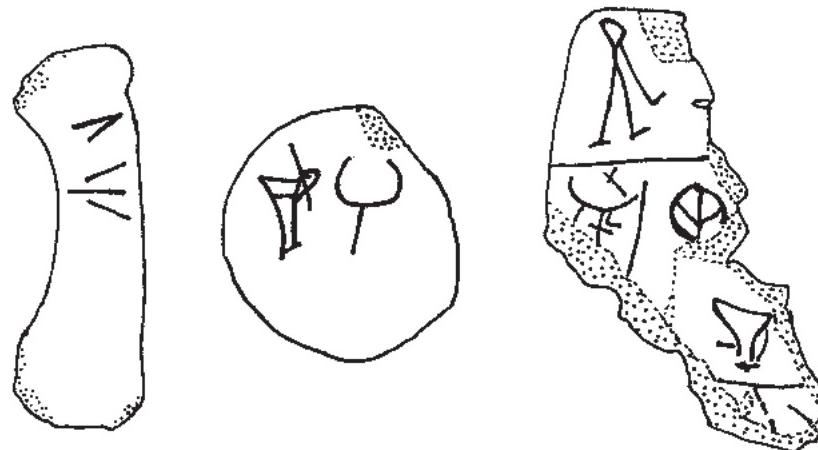
Fig. 6.4: Terracotta spool and discoid loom-weight (top) and bone pin (bottom) from LC I contexts at Phylakopi (after Cherry and Davis 2007, figs. 10.2 no. 479, 10.2 no. 214, and 10.4 no. 236).

Beginning in the late MC period, another type of weaving is attested by discoid loom weights of Minoan type. Numerous examples were found during the early excavations (Bosanquet and Welch 1904, 200–201) and two more were recovered from LC I-II contexts in Renfrew's trenches ΠΙΑ and ΠΛα (Cherry and Davis 2007, 403–405; Renfrew and Cherry 1985, 331). Such loom weights were used with the vertical, warp-weighted loom, which “offers a distinct advantage over other looms in maintaining a constant and even tension on the warp threads, no matter how they are manipulated. In pattern weaving, especially, where weft threads of different sizes may be introduced, often with uneven distribution, warp-weighting is an elegant solution to a sometimes difficult problem” (Edmunds 2012). The presence of discoid loom weights indicates that this type of loom was adopted from Crete, directly or indirectly, via either the immigration of Minoan/Minoanised women (to judge by ethnographic and historic evidence), or the apprenticeship of Melian women abroad (on the transmission of weaving technologies, see Cutler this volume; 2012). Of pertinence to these considerations are two half-discoid loom weights – a rare sub-type known from the Mesara on Crete – and seven discoid weights with tabbed top, all of similar, non-local clay; all are from the 1911 excavations and lack recorded contexts (Cutler 2011, 240). Presumably this transfer of technology and skills was made in order to produce high-quality, pattern-woven textiles in the Minoan style on Melos. As Cutler notes, not only were these garments produced by women, they were also consumed in large part by women. Ritual occasions may have been an important arena for their display (see above).

The low numbers of loom weights at Phylakopi, however, may indicate a limited adoption of this Cretan technology (Cutler this volume) – a hypothesis that accords well

with the restricted use of the Minoan potter's wheel and limited presence of Cretan-inspired architecture. There are no large concentrations of weaving equipment known at Phylakopi, although the early excavators' recording and discard practices clouds our understanding of much of the site. Spinning wool, weaving (on both the horizontal and vertical looms), and even dyeing seem to have been practiced throughout the town. The discovery of a stone tank filled with small plain cups, loom weights, and stone pestles in the PRC suggests that weaving and dyeing (the pestles being used to ground dyestuffs; the tank for washing, dyeing and/or fulling), occurred there (Cutler 2011, 238, 241). In addition to the Minoan-style architecture, frescoes, and cult practices of the PRC, we may now add weaving.

A handful of bronze and bone pins are known from MC and early LC contexts. The most notable is a bone pin with a double-segmented bulbous head (SF 236) from a mixed LC I/II context in the area of the Mansion (Cherry and Davis 2007, 415–418; see also Renfrew and Cherry 1985, 329–330). Konstantinidi (2001, 260) notes that “it is not always easy to distinguish between hair-pins and dress-pins” and that some may have served both purposes. The pin in question from Phylakopi, however, is quite different in form from the hooked hairpins depicted in the ‘injured adorant’ fresco in Xeste 3 at Akrotiri on Thera (Vlachopoulos and Georma 2012, 40) but similar to examples found in Shaft-Grave-era burials on the Greek mainland, where they are usually located at the right shoulder of the deceased, predominantly women and children but sometimes boys and men (Haas-Lebegeyev 2012, 429–431). These comparanda, together with Hallager's (2012) statement that no good evidence for dress pins exists on Crete before LM IIIC, suggest that at least some Melians pinned their garments at the shoulder in a manner similar to early Mycenaeans.



*Fig. 6.5: Linear A inscriptions on a jug handle (MI Zb 3), a pot base (MI Zb 1), and fragmentary tablet (MI 2) from Phylakopi (after Karnava 2008, fig. 36.6).*

As with the use of the horizontal loom, this mode of dress appears to have been common to both the Greek mainland and Cyclades in the Bronze Age, not the result of a Mycenaean fashion being adopted on Melos in the LBA.

### Administration

In the MBA and early LBA, Melians incised symbols on ceramic vessels that may have served to identify the potter (Bailey 2007, 454). Late in the MC period, Melians began to incorporate Minoan Linear A signs into their corpus of so-called potter's marks (Evans 1904), suggesting some familiarity with the Cretan script. Aside from these odd symbols, short Linear A inscriptions are known from two possibly local vessels (Fig. 6.5): a pot (MI Zb 1) and a MM III–LM I-style jug handle (MI Zb 3). Both were found by the original excavators but do not have recorded contexts (MI Zb 1: Evans 1904, 183–184; MI Zb 3: Sherratt 2000, 350–351). A fragmentary Linear A tablet (MI 2) from the mixed LC I–II fill beneath the Megaron may be associated with the LC I Mansion that had stood on the site (Renfrew and Brice 2007; see also Karnava 2008, 383). Whether these inscriptions represent the adoption of a Minoan language by certain Melians, the adaptation of this Minoan script to another language, or the presence of Minoan emissaries, administrators, or merchants, remains unclear (*cf.* Renfrew 1998; 1999). If these inscriptions were made by, or intended to be read by, Melians, then we must consider how proficiency in Linear A could have been achieved. By way of comparison, in Egypt princes and privileged youths learned to read and write at court and the sons of scribes were often tutored and trained by their fathers. For others with means, enrolment in scribal schools, which were often located near the royal court, was an option. Children, beginning around age six or seven, pursued their studies for at least four years, after which they served an extended

apprenticeship (Piacentini 2001). Whether or not mastery of Linear A required equally rigorous training is unknown. The Egyptian evidence, however, does provide a general idea of how Melian literacy of Linear A might have been achieved.

Despite use of the Linear A script, there is no clear evidence for Minoan sealing practices on Melos. An inscribed clay 'label' mentioned by the early excavators but not saved may refer to something similar to the inscribed roundel found at Ayia Irini on Kea (Sherratt 2000, 351; Evans 1904, 194 and fig. 158). Otherwise, the apparent absence of Minoan sealings distinguishes Phylakopi from other Cycladic sites in the early LBA (*e.g.*, Karnava 2008) and suggests selectivity in adopting aspects of Minoan administration.

The presence of lead weights on the so-called Minoan standard of measurement at Phylakopi indicates knowledge of, and participation in, a broad network of exchanges. Their use in LC I, however, is unclear since the known examples come from the early excavations and do not have recorded contexts (Petruso 1992, 52; Bosanquet and Welch 1904, 192).

### Late Cycladic II (c. 1525–1425 BC)

As noted above, there is no site-wide stratigraphical transition from LC I to II at Phylakopi. By and large, occupation appears to have continued without interruption. In some cases, however, distinct LC II deposits from the early excavations are recognizable, mainly by the presence of imported LM IB/LH IIA pottery. The duration of occupation in LC II is equally unclear since evidence of a burnt destruction dating to LM IB/LH IIA was found in parts of the site and few LM II and LH IIB sherds have been recovered. The site may have been depopulated or even abandoned during the latter part of LC II (see discussions in Barber 1974; Whitelaw 2005; Renfrew *et al.* 2007; Brodie *et al.* 2008; Brodie 2009).



Fig. 6.6: LC II hemispherical cup with running quirk and dotted border (after Dawkins and Droop 1911, Pl. 10.138) and sherds with crosses and swastikas (after Dawkins and Droop 1911 Pl. 14.23, 31).

### Ceramics

There are many recognizable imports, both Minoan and Mycenaean, but it is often difficult to distinguish the LH IIA from LM IB sherds. Many vessels are decorated in the Marine Style (Mountjoy 1985; 2007, 360–370). The late LM IB Alternating Style is not common (some jugs and bell cups) and there is little LM II: one possible sherd – from a conical rhyton with bivalve decoration similar to an example from Knossos – is published from Renfrew's excavations (Mountjoy 2007, cat. no. 345); four others (from a pyxis, beaked jugs, and a cup) were identified among the 1911 material (Mountjoy 2009, 74–76).

According to Berg (2000, Graph 6.12), in late LC I/LC II Helladic ceramics arrived in greater quantities than those from Crete: 1.7% versus 0.2% of the sherds from Renfrew's excavations. Macroscopic identifications may be misleading, however, since INAA has shown that many vessels once believed to be Cretan imports are actually mainland products (Mountjoy 1999, 890, ns. 191 and 192; 2004; Mountjoy and Ponting 2000). Attica appears to have been a leading centre of this pseudo-Minoan pottery production, although other sources are evident. Mountjoy has identified Marine Style sherds with a buff clay and white slip that may be southern Lakonian, two Alternating Style bell cups with decorative schemes and orange fabric that are similar to presumed Messenian examples, and a number of Marine Style vessels with large argonauts that may have been made at one or more mainland centres for export to the islands (Mountjoy 1999, 890–891). One or two jug fragments find parallels on Aegina (Mountjoy 2007, 329–330). A variety of drinking, serving, and storage vessels are attested among the LH IIA/LM IB pottery. The same may be said regarding the few LH IIB sherds: piriform jars, squat and beaked jugs, cups, ring-handled cups, and goblets are known (Barber 1981, 6–7; 1999a, 137 and n. 46; Mountjoy 1985, 199–201; 1999, 890–891; 2007, 333–335; 2009, 89–91).

The impact of LM IB/LH IIA styles on Melian LC II pottery was negligible. This represents a change from the

preceding period, during which Minoan shapes and motifs had been increasingly incorporated into the local ceramic repertoire. LC I shapes and motifs continued to appear (*cf.* Barber 2008, 165–167) but motifs characteristic of LC II may include the running quirk, swastika and cross, dotted-line borders, and arcaded leaf pattern; the low hemispherical cup may be a hallmark shape (Fig. 6.6) (Davis and Cherry 2007, 296; see also Furumark 1950, 198; Mountjoy 2007, 326; Barber 2008, 117). Further changes in the Melian ceramic assemblage, namely a decrease in Cycladic White and Dark Burnished/Washed wares, have been noted by Berg (2000, 136–137). The declining popularity of Cycladic pottery traditions seems to reflect a shift in consumer preferences toward more finely made, lustrous-painted Minoan and Mycenaean vessels, as Fig. 6.7 illustrates.

### Administration

Although there is no clear evidence for Minoan sealing practices at Phylakopi, a Cretan ivory signet ring (Fig. 6.8) was found in a LC II floor deposit in Room H2:14; no other contextual information is given by the early excavators (CMS 1, 410; Bosanquet and Welch 1904, 193; Younger 1985, 295). As noted above, the apparent absence of sealings distinguishes Phylakopi from other major Cycladic towns in the LBA.

### Late Cycladic IIIA1 (c. 1425–1390 BC)

Rebuilding on a large scale is evident at Phylakopi early in LC IIIA1 (Mackenzie 1904, 266–267; Barber 1974, 51; Whitelaw 2005, 42; Renfrew *et al.* 2007, 52; Brodie, Boyd and Sweetman, 2008, 413–415). While the beginning of the period is rather clearly defined stratigraphically, there is no clear site-wide division marking its end. Renfrew made no distinction between IIIA1 and 2, instead grouping both into Phase E. Diagnostic Minoan and Mycenaean sherds have been identified, and certain buildings may be dated to one ceramic phase or the other.

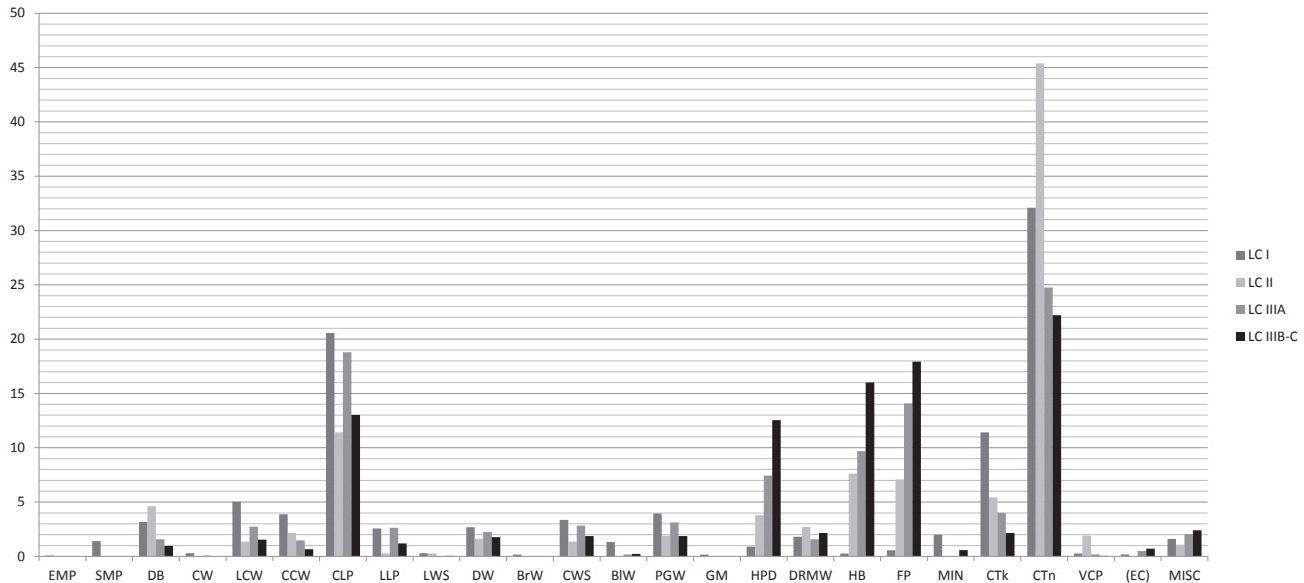


Fig. 6.7: Percentages of fabrics from Renfrew's Trench PLA for LC I, II, IIIA, and IIIB–C (data from Vaughan and Williams 2007, Tables 4.3 and 4.4, with LC II layers identified based on stratigraphic information provided in Renfrew et al. 2007, figs. 3.56 and 3.57 and Davis and Cherry 2007, 305). EMP=Early Matt Painted, SMP=Soft Matt Painted, DB=Dark Burnished, CW=Cycladic White, LCW=Late Cycladic White, CCW=Coarse Cycladic White, CLP=Coarse Local Painted, LLP=Later Local Painted, LWS=Late White Slip, DW=Dark Washed, BrW=Brittle Ware, CWS=Coarse White Slip, BIW=Black Ware, PGW=Purple Gritty Ware, GM=Grey Minyan, HPD=Hard Painted Domestic, DRMW=Dark Red Micaceous Ware, HB=Hard Buff, FP=Fine Painted, MIN=Minoan, CTk=Coarse Thick, CTn=Coarse Thin, VCP=?Very Coarse Pottery (not discussed in publications), (EC)=?Early Cycladic (not discussed in publications), MISC=Miscellaneous (for fabric descriptions, see Vaughan and Williams 2007, 94–104).

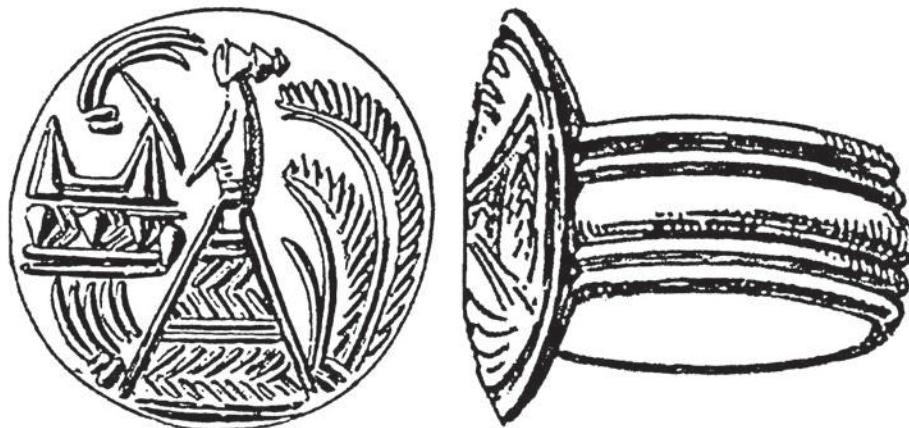


Fig. 6.8: LM IA ivory signet ring from a LC II context at Phylakopi (after Bosanquet and Welch 1904, 193, fig. 162).

### Architecture

Notable amid the rebuilding in early LC IIIA1 is the Megaron constructed over the levelled remains of the LC I–II Mansion. Barber (1992, 19; 1999a, 136–137; 1999b, 315–316) has noted the Megaron's similarity to the LH IIIB–IIIA1 Mansion 1 at the Menelaion in Lakonia in its modest size, arrangement of central room, and large threshold block (see Catling 2009), while its rectangular hearth finds a good parallel in the LH IIIA1 megaron at Tiryns (see Kilian 1987,

209 and figs. 6 and 7). Despite these mainland parallels, the possibility that the Phylakopi Megaron was indebted to the earlier Mansion cannot be overlooked, given their similar location, size, plan, and orientation (for the construction sequence, see Renfrew et al. 2007, 32–36). Regardless of the source of inspiration, it would be imprudent to assume that the symbolic meanings and practices associated with later Mycenaean megara – *i.e.*, the ‘wanax ideology’ (Kilian 1988) – already was articulated fully by this early phase of

the Mycenaean palatial period, or that Melians subscribed to it. Without a record of the building's contents we cannot understand how it was used and what its cultural significance may have been.

### Ceramics

Mountjoy has noted that the number of Mycenaean ceramic imports increased from LH II but no statistics are available to provide verification. The typical LH IIIA1 motifs and shapes are represented, with goblets being the most common, followed distantly by shallow cups (Mountjoy 1999, 891; 1985; 2007; 2009, 91–99). Many imports came from the northeastern Peloponnese (Jones 1986, 499–501), although a group of LH IIA–IIIA2 vessels may be Messenian (Mountjoy 1999, 889). A Sparse Matt-painted jug – a class of pottery well attested in Athens (Acropolis Wells) and at Ayia Irini on Kea – is also known (Mountjoy 2007, 335, cat. no. 377; see also Barber 2008, 164). A few LM IIIA1 sherds are known from Renfrew's excavations, namely a rhyton, a bowl, and a sherd from a closed shape (Mountjoy 2007, 338, cat. nos. 400, 401, 135), and among the saved 1911 ceramic material are seven LM IIIA1 sherds, including a large Palace Style jar and two similar but smaller vessels (Mountjoy 2009, 74–79). The lack of contextual information for many of these vessels prevents analysis of their use and significance on Melos.

Our understanding of the local pottery does not permit distinctions between LC IIIA1 and IIIA2 sherds. Consequently, all local sherds from strata assigned to Phase E by Renfrew are treated together here (Fig. 6.7). Continuity from the earlier LBA is apparent in the relative proportion of several wares (*e.g.*, Later Local Painted, Purple Gritty Ware, and Dark Red Micaceous Ware) in the overall assemblage from trench PLa, although change is evident in others (decline in Coarse and Late Cycladic White, and Dark Buff; increase in Hard Painted Domestic and Hard Buff). A plausible explanation for these changes may be the growing popularity of high-quality, lustrous-painted Mycenaean imports. Indeed, the Hard Painted Domestic and Hard Buff wares come closest in appearance to these vessels but are somewhat poorer in quality and have simpler decoration (Barber 2008, 152–153); even the later, locally made, decorated Mycenaean pottery of LH IIIC is poor and untidy (Mountjoy 2007, 344). A lack of well-documented contexts prevents inquiry into the use and significance of the various ceramic wares at Phylakopi in this period. Various shapes were made locally, but there is a notable decline in Minoan-style conical cups of the earlier LBA, presumably because imported Mycenaean goblets/kylikes – and the kraters typically associated with them – had come into favour (Earle 2015; Mountjoy 2007, 336; 2009, 91, 99).

### Cult Objects

Terracotta figures and figurines provide the only evidence for cult activities in this period. Mycenaean imports include

a naturalistic seated female figurine in the LH IIIA1 style (SF 121) and an animal figurine with banded decoration (SF 477); both come from what appear to be domestic contexts in trench PLa (Renfrew *et al.* 2007, 70–71). A proto-Phi type figurine from the early excavations may be an import (French 2007, no. 2); no context is recorded but most mainland examples of this type come from LH IIIA1 deposits (French 1971, 112, 115; Weber-Hiden 2009, 24, Table 1). A terracotta throne fragment of uncertain origin (SF 1019) may date stylistically to LH IIIA1 but comes from a later context in the courtyard of the LC IIIA2–IIIC Sanctuary (French 1985, 254).

Local imitations of LH IIIA1 Mycenaean-style figurines are few and come from the early excavations: a proto-Phi figurine (French 2007, 441, no. 3) and an example of the Naturalistic type (French 2007, 441, no. 1). Both lack recorded contexts, and French is certain of the local manufacture of only the proto-Phi example, but notes that the Naturalistic figurine is not from the Argolid. While local potters at Phylakopi did not require special training to manufacture these Mycenaean-style figurines, they did need first-hand knowledge of the types in question in order to reproduce Mycenaean types faithfully.

Figurines of local type are poorly attested in this period, with a single hand from a large human figure (SF 2278) and a clay box (SF 73), both from LC IIIA contexts in trench PLa, known (French 2007, 437–439; for the associated Mycenaean sherds, see Mountjoy 2007, 315). These examples illustrate that Mycenaean-style figurines formed but one part of the small Melian coroplastics assemblage in LC IIIA. However, given the small sample size and dearth of recorded contexts, we cannot determine if products of the local tradition were put to different uses than Mycenaean figurines, or if local Mycenaeanising figurines were distinguished from Mycenaean imports.

### Personal Adornment

Varied evidence for weaving is known from the early excavations at Phylakopi and may belong to LC IIIA1, but only a few finds from Renfrew's excavations can be confidently assigned to this phase.

The spools attested in earlier periods are not known from the LC III contexts excavated by Renfrew and none are published from the early excavations. Their absence suggests that weaving on the horizontal loom may have changed or even ceased by this period. A few Cretan-style discoid loom weights from LC IIIA levels indicate the continued use of the warp-weighted loom (Cherry and Davis 2007, 401–405, 408–410). Loom weights of a pyramidal or conical form known from the Greek mainland have not been noted in the published excavation reports (Sherratt 2000, 184 n. 1; *cf.* Carington Smith 1975, 456) but Cutler (2011, 238 n. 95) mentions that a few examples are stored in the National Archaeological Museum in Athens. To what period

they belong, from where on the site they came, and whether or not they were made locally, are unknown.

The use of Mycenaean ‘buttons’ or *conuli* – small, light, conical objects – has long been debated, although their identification as spindle whorls used in making fine woollen or linen threads is convincing (Andersson and Nosch 2003, 202–203). A steatite example of truncated conical form, a common Mycenaean type, was found with LH IIA and LH IIIA1 sherds in trench PK (Cherry and Davis 2007, 423–424, 427: SF 715; for associated pottery, see Mountjoy 2007, cat. nos. 160 and 189) and four other examples are known from later deposits in the Sanctuary (Renfrew and Cherry 1985, 344–345, 402–403, 423–424). Eight stone spindle whorls are mentioned in the early excavation report, two of the three illustrated appear to be small (no dimensions or weights given) and thus may be considered here (Bosanquet and Welch 1904, 213, pl. XXXVIII.12–14). The early excavators contrast these stone whorls with a number of coarse, ‘pre-Mycenaean’ clay examples. Dawkins and Droop (1911, 22) mention clay and stone spindle whorls, but do not offer descriptions or illustrations; it is thus uncertain whether Mycenaean steatite ‘buttons’ were found in that campaign. Their presence on Melos indicates a change in the equipment for spinning yarn. The reason behind this change is not certain, although a demand for finer threads than previously may be posited. The appearance of buttons in LM II–III tombs on Crete (Hallager 2008, 357–358) indicates that Melos was but one community where these objects were adopted at this time.

Few items of personal adornment can be confidently assigned to this phase. A pin with earlier parallels at Lerna on the mainland was found in an early occupation layer of the Megaron (Cherry and Davis 2007, 416–417: SF 215). Boar’s tusk fragments come from a context that may predate the construction of the West Shrine in LC IIIA2 (Renfrew and Cherry 1985, 329: SF 1723). One use of such tusks was in Mycenaean-style helmets, which are likely to have been status symbols given the prestige accorded boar hunting in Mycenaean frescoes and later Greek myth (Morris 1990). The presence of boar’s tusk fragments may indicate that certain Melians adorned themselves as Mycenaeans did; this seems to have been the case on Thera in LC I (Akrivaki 2003). Since wild boars do not seem to have been present on Melos (Wagstaff and Gamble 1982, 103), such tusks must have been imported or otherwise acquired abroad. Little can be said about a bead of glass paste (SF 712) found in trench PK (Cherry and Davis 2007, 424) that resembles examples known from various sites in the Aegean.

### **Late Cycladic IIIA2 (c. 1390–1300 BC)**

As noted above, the LC IIIA1 and 2 ceramic phases cannot be readily distinguished stratigraphically at Phylakopi. The presence of imported LH IIIA2 pottery is a key

chronological indicator but was often found with earlier and/or later sherds during Renfrew’s excavations.

### **Architecture**

A striking architectural addition of LC IIIA2 is the West Shrine, which was constructed early in the period at the southern edge of town (Renfrew 1985, 80–81; Mountjoy 1985, 152). It was the first of two shrines in the so-called Sanctuary. Neither its size nor appearance is monumental, although its eastern façade was carefully constructed and fronted by a sizeable courtyard. Inside there are platforms and a small rear chamber; a later blocking wall – which was not removed during excavations – may obscure central posts and/or a platform. These features find affinities with contemporary cult buildings in the eastern Peloponnese, namely the Room with the Fresco Complex and the Temple at Mycenae, and the sanctuary at Ayios Konstantinos on the Methana peninsula (Renfrew 1985, 407–411; Whittaker 1997; Konsolaki 2002; Konsolaki-Yannopoulou 2004). None of these comparanda, however, clearly predates the West Shrine, thus raising the possibility that Melians had an active role in formulating a common architectural vocabulary in the region (*pace* Renfrew 1985, 436, where the possibility of mainland predecessors is raised).

### **Ceramics**

Few imported LH IIIA2 decorated sherds were reported from the 1974–77 excavations (Mountjoy 1999, 891) but sherds belonging to nearly 50 vessels are now known from the saved 1911 material. Closed shapes include a few piriform jars, stirrup jars, and rounded and straight-sided alabastra; open shapes include kylikes, cups, spouted cups, stemmed bowls, and conical rhyta. The usual LH IIIA2 motifs are present (Mountjoy 2009, 99–105). As in LC IIIA1, all the decorated Mycenaean-style pottery was imported, mainly from the northeastern Peloponnese. Exceptions include a straight-sided alabastron that may be Euboean (Mountjoy 2009, 99) and a stemmed bowl possibly from Boeotia (Mountjoy 1999, 908, cat. no. 97); a group of LH IIA–IIIA2 vessels that may be Messenian has already been mentioned (Mountjoy 1999, 889). Seven LM IIIA2 sherds – five of which are from open vessels – were found among the saved 1911 ceramic material (Mountjoy 2009, 74–79). In addition, there is a late LM IIIA2 rhyton, probably from the early excavations, without recorded provenance (Koehl 2006, cat. no. 909, originally noted in Scholes 1956, 29). The local pottery of this phase cannot be separated from that of LC IIIA1 but, as noted above, certain changes in the ceramic assemblage may imply the introduction of Mycenaean dining and drinking practices.

### **Cult Objects**

The contents of the West Shrine – beads, shells, a sealstone, steatite ‘buttons’ or whorls, pottery, terracotta figures

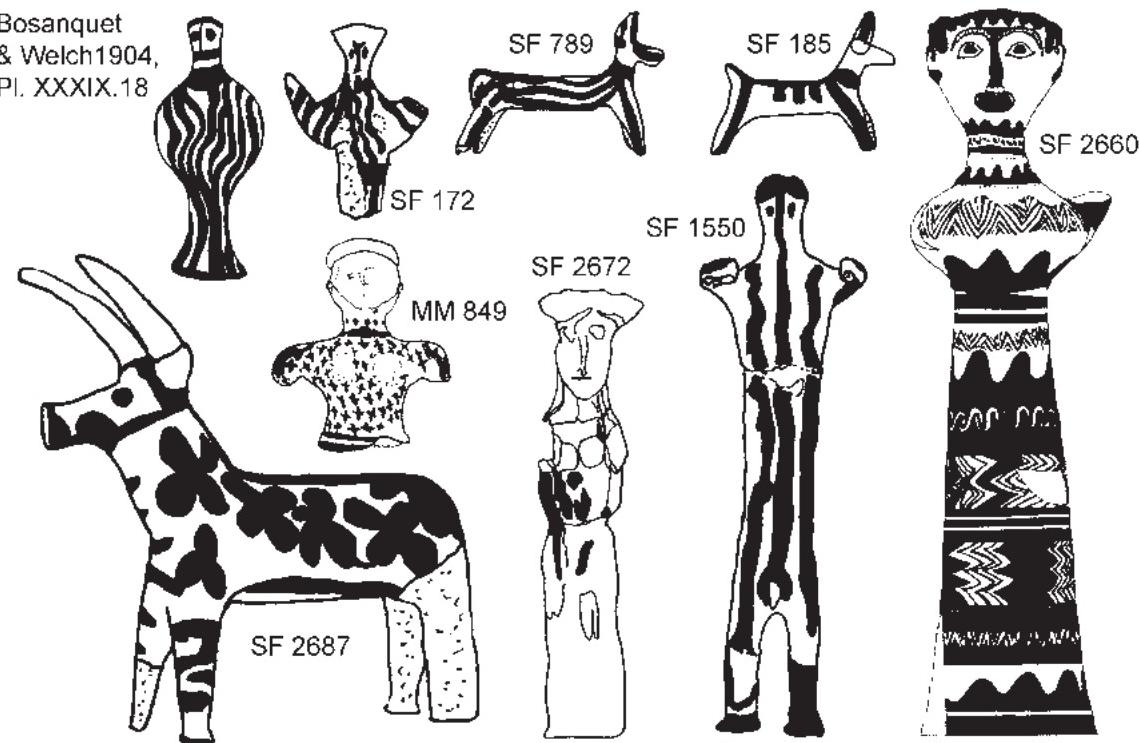


Fig. 6.9: Selection of figurines (top row) and figures (bottom row) from LC III contexts at Phylakopi (after Bosanquet and Welch 1904, Pl. XXXIX.18; French 1985, figs. 6.1, 6.3–4, 6.14, 6.29–30, Pl. 39; 2007, Pl. 60). The Mycenaean figurines in the top, from left to right, belong to the Phi-A type, Late Psi B type, Wavy type 2, and Heavy Spine type.

and figurines, and various metal items – accumulated over centuries and find good parallels in the LH IIIA–B sanctuaries at Mycenae and Methana on the Greek mainland (Renfrew 1985, 97–100, 393–444; Wright 1994, 61–62; Whittaker 1997, 17–26). Certain objects belonging to an early phase of use in LC IIIA2 have been identified and are discussed here.

Of particular note are the terracotta figures and figurines (Fig. 6.9). The so-called Lady of Phylakopi (SF 2660), a large figure dated stylistically to LH IIIA2 Early, is made of clay visually resembling that of the Argolid but with painted decoration that finds parallels on Crete (French 1985, 211–215); this combination speaks to the close relations between the Argolid and Knossos at this time (Demakopoulou 1997). A female figure discovered in the West Shrine after Renfrew's excavations makes similar references: its origin is unclear but stylistically the figure resembles a LM II example from the Unexplored Mansion at Knossos (French 2007, 443). Locally made figures of probable LC IIIA2 date are also attested in the West Shrine. An ‘ugly’ head found in a niche of the rear chamber is stylistically similar to LH IIIA1–2 examples from Mycenae (French 1985, 215, 222; SF 2691). Likely belonging to another example of this type is an arm fragment from the floor make-up of the same room; it is of uncertain origin (French 1985, 217; SF 1083).

Found beside the Lady of Phylakopi, and possibly of similar date, was a ‘unique rough and unparalleled’ female figure of local clay (French 1985, 211: SF 2658). A local female figure (SF 2661) is decorated in a manner similar to early (*i.e.*, LH IIIA) Mycenaean figurines (French 1985, 213). The transposition of a Mycenaean figurine style onto a local figure indicates that its creator was both knowledgeable of figurines and not averse to experimentation. Five locally made male figures were found in the West Shrine and are significant given the rarity of male figures in the Mycenaean world. Although the date(s) of their production could not be determined stylistically or contextually, the discovery of a similar terracotta hand fragment in trench PLa (French 2007, 438, 440: SF 2278) points to a possible LC IIIA2 date. Two of the ten bovine figures from the Sanctuary have clover designs and naturalistic details (SF 2685 and 2687) that suggest a LH IIIA2 date; the former is an import, the latter probably local; the two were found together in the West Shrine.

With respect to figurines, a small number of imported Wavy type 2 animal figurines (SF 789, 1557, 2301) may date to this period but come from later and/or mixed contexts in the Sanctuary (French 1985, 262). A horn fragment of a local animal figurine (SF 455) from PLa was found with LH IIIA and IIIB1 sherds (Mountjoy 2007, cat. nos. 124 and

99) and can be stylistically dated to LH IIIA2–B1 (French 2007, 438). The imported Phi-A type female figurine from the early excavations (French 2007, 441, no. 4) likely dates to LH IIIA2 (*cf.* Wider-Hiden 2009, 24, Table 1). A possible Phi-type female figurine (SF 714), dated stylistically to LH IIIA2/B1, was found with LH IIA and IIIA1 sherds in trench PK (French 2007, 438–439; for the accompanying sherds, see Mountjoy 2007). Four other Phi-type figurines are mentioned by the early excavators but not illustrated and do not have known provenances (French 2007, 441, nos. 11–14); if Phi-A types, then they may also be counted here. In addition, there are three early Psi types (nos. 18–20), one of which was imported, that may date to LH IIIA2 (*cf.* Weber-Hiden 2009, 24, Table 1).

In sum, fewer than 20 figures and figurines can be dated to this period, most come from the Sanctuary, local figures are more numerous than imports, and imported figurines outnumber local imitations. Interestingly, ceramicists on Melos seem to have expressed greater creativity when crafting the large figures than the small figurines, which hew close to mainland prototypes.

### Personal Adornment

A LC IIIA2 deposit in the West Shrine included a bone pin with double-segmented bulbous head that was likely used in fastening garments (Renfrew and Cherry 1985, 329–330; SF 2507). As discussed above, such pins are well represented on the Greek mainland and imply similarities in dress. Weaving on the warp-weighted loom continued, as indicated by Minoan-style discoid loom weights in LC IIIA contexts (Cherry and Davis 2007, 403–405, 410). The typical Mycenaean pyramidal and conical loom weights and ‘buttons’ mentioned earlier also may date to this period.

### Administration

No Mycenaean Linear B inscriptions are known, nor are any sealings. A seal in the LM II–IIIA1 Cut Style comes from an early deposit in the West Shrine (Fig. 6.10), and several seals recovered from LC IIIC contexts in the East Shrine (see below) can be dated stylistically to LH IIIA–B. Since one of these appears closely related to a seal from a LH IIIA–B context at Ayia Irini on Kea (Younger 1985, 286–287, 294–295), the Phylakopi seal in question may have arrived earlier than its final context. The concentration of seals in the Sanctuary, coupled with the absence of sealings, suggests that they were not used for sphragistic purposes in Melian society during this period. Krzyszkowska (2005, 274) has noted that “their prevalence in ‘peripheral’ areas... suggests that their owners used them to negotiate status at the local level by emulating perceived norms of behaviour in the Mycenaean heartland”, where they seem in large part to have lost their administrative function in LH IIIA–B.

### Late Cycladic IIIB (c. 1300–1200 BC)

Stratigraphic distinctions between LC IIIA and B are unclear since the imported ceramics are mixed, although Renfrew does distinguish between Phases E (LH IIIA) and F (LH IIIB–C), presumably based on the preponderance of diagnostic Mycenaean pottery present in levels. The end of LC IIIB at Phylakopi is not marked by destruction, in sharp contrast to many sites on the Greek mainland; occupation seems to have continued uninterrupted until LH IIIC Middle (Renfrew *et al.* 2007, 69–70 and fig. 3.56).

### Architecture

The East Shrine, a small rectangular building, was built in this period. Its appearance is not unlike the ordinary houses at Phylakopi, although the façade was carefully built of irregular conglomerate tuff blocks and reused ashlar. In this respect it can be compared to the east façade of the earlier West Shrine and contrasted with the large, rounded boulders of the nearby City Wall, which was also built in early LC IIIB (Renfrew 1985, 101). Within the East Shrine a platform for votives and/or cult objects stood in the northeast corner. As with the West Shrine, good parallels exist with Mycenaean cult buildings on the Greek mainland. In the courtyard between the two shrines an upright stone was erected, and if its interpretation as a baetyl is correct, its presence would suggest Cretan influence on Melian ritual practices (Renfrew 1985, 101–102, 430–431; see also Warren 1990). These additions speak to the expansion

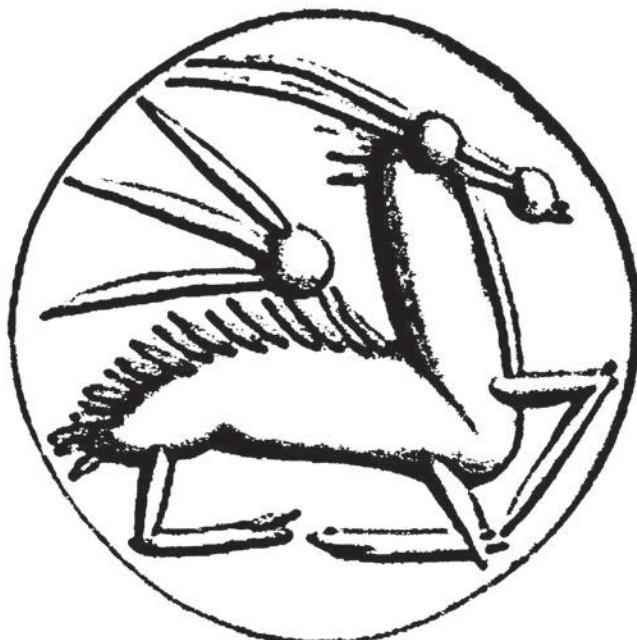


Fig. 6.10: Sealstone from LC IIIA2 context in the West Shrine at Phylakopi (after Younger 1985, Pl. 49).

of worship in the Sanctuary, undoubtedly from a perceived need to appease or honour particular deities.

LBA funerary architecture is not positively attested at Phylakopi. Most of the rock-cut chamber tombs surrounding the town of Phylakopi were robbed, thus preventing their dating, although sherds of the local geometric style and a few of “imported Mycenaean” (here probably meaning Minoan) suggest a MC–early LC date (Edgar 1904a). Two Mycenaean-style chamber tombs dating to LC IIIB have been found some distance from Phylakopi, near present-day Zephyria at Langada/Tripytes and Langada/Sotira (Mountjoy 1999, 889; Schallin 1993, 119–120). These two tombs may suggest familiarity with mainland burial practices, although the earlier examples from the area of Phylakopi suggest local antecedents.

### Ceramics

Mountjoy (1999, 891; 2009, 105) notes that decorated LH IIIB vessels are rare. Closed shapes (*e.g.*, large jugs, hydriae, piriform jars, stirrup jars) are uncommon, as are certain shapes typical of the Greek mainland such as the krater, mug, stemmed bowl, and deep bowl. An imported LH IIIB1 rhyton was noted by Koehl (2006, cat. no. 1049), and Mountjoy (2009, 108) has published another. Only one LH IIIB2 sherd – from the rim of a Group B deep bowl – has been confidently identified by Mountjoy (1999, 891). As for Cretan imports, six LM IIIB sherds, two of which are identified as Chaniot, were found among the saved 1911 ceramic material (Mountjoy 2009, 74–79). Worthy of note are the two imported Mycenaean kraters and approximately twenty local kylikes deposited, *inter alia*, in a LC IIIB1 pit beneath the City Wall (Renfrew *et al.* 2007, 63; Earle, in preparation). The ratio of kraters to kylikes, about 10 to 1, recalls that proposed by Stockhammer (2012b, 19) for a typical Mycenaean drinking set. Thus, if the pit’s contents were deposited at a single event, as I believe, it is possible that at least some individuals on Melos had adopted not just Mycenaean tableware but also Mycenaean drinking practices. More generally, the mixture of local and imported vessels of various shapes in this deposit is indicative of their intertwined uses in Melian society.

With regard to local ceramics, Mountjoy (1999, 891) notes that Mycenaean-style decorated vessels began to be produced in the form of large jugs and hydriae. These vessels are of lower quality than Mycenaean imports from the Argolid. The strata of Renfrew’s Phase F (LC IIIB–IIIC Middle) in trench PL<sub>A</sub> (Fig. 6.7) indicate that while Fine Painted (*i.e.*, Mycenaean) wares increased from the preceding period, percentages of Purple Gritty Ware and Dark Red Micaceous Ware remained fairly constant. Decorated wares decreased slightly, Coarse and Later Cycladic White Slip and Dark Burnished further declined, and Hard Painted Domestic and Hard Buff continued to increase. Mycenaean and local wares imitative of it

constitute nearly half of the assemblage. It appears that as Mycenaean imports from the Greek mainland dwindled in LH IIIB, painted pots in the Mycenaean style began to be produced by Melian potters, who changed their practices in reaction to outside forces and local demands.

### Cult Objects

The finds from the East Shrine (for a complete list, see Renfrew 1985, 103–105) are comparable to those from the West Shrine and find parallels at Mycenaean sanctuaries on the mainland. While it is not possible to distinguish IIIB deposits from the LH IIIC Middle collapse in the Sanctuary (Renfrew 1985, 101–102), a number of fragmentary figurines may belong to IIIB on stylistic grounds. Likewise, figurines recovered elsewhere on the site may be dated stylistically to this period.

LH IIIB Mycenaean-style female figurines do not appear to have been used or deposited in the Sanctuary but a few probable examples were found elsewhere in the town, mainly during the early excavations. As catalogued by French (2007), there are six Phi-B examples (nos. 5–10), at least two of which may be imports, three Late Phi figurines (nos. 15–17), one of which is presumably local, and six Psi-types (nos. 21–22, 29–32), none of which have known origins. According to Weber-Hiden’s (2009, 24, Table 1) chronological classification of Mycenaean female figurine types, Phi-B types come mainly from LH IIIB1 contexts, Late Phi types come from LH IIIB2 deposits, and most Psi types come from IIIB1–2 contexts.

The imported and local Mycenaean animal (bovid) figurines are concentrated in the East Shrine but are known from all parts of the site. Much less chronological refinement exists for these than for the female figurines just discussed. For the most part the various types are all stylistically datable to LH IIIA–B (French 1971, 151–158). Those from the East Shrine, which come from LC IIIC contexts, must post-date the building’s construction in LC IIIB1. Both locally made and imported examples are known. Among the complete and diagnostic fragments of animal figurines, the main Mycenaean types are known: Wavy and Spine types are mostly imports, Linear types are mostly local products (Fig. 6.11).

The possibility exists that these distinctions have a chronological component (*i.e.*, that earlier types are largely imported while later types are predominantly local products), although the uncertainty surrounding large numbers of figurines from the early excavations, together with the chronological coarseness of Mycenaean figurine typologies, clouds such conclusions. That said, diminished numbers of Mycenaean imports accompanied by an increase in local Mycenaeanising products were noted above for IIIB decorated ceramics. Correlation of these trends would not be surprising since Mycenaean figurines and pots were likely made in the same mainland workshops (*cf.* Weiberg 2009; Petrović 2009; Shelton 2009).

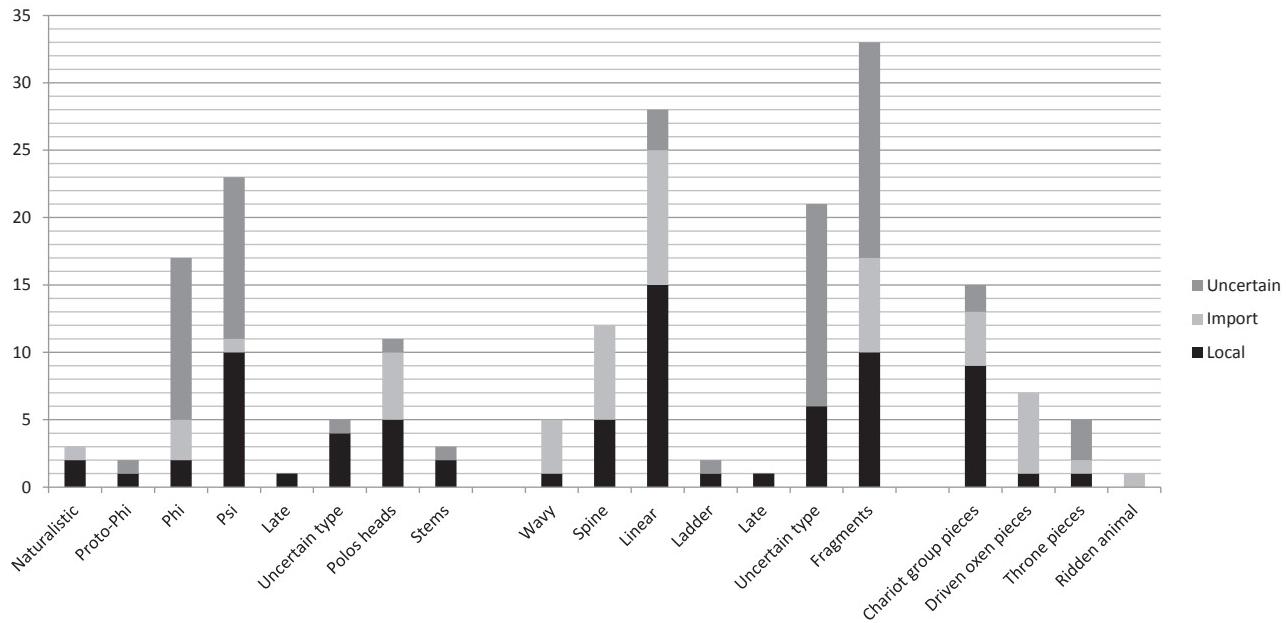


Fig. 6.11: Numbers of Mycenaean female, animal, and group figurines from Phylakopi.

Mycenaean group figurines, which date broadly to LH IIIA–B, may be noted briefly here. Chariot groups appear to have been popular, with fifteen pieces identified (nine were locally made, two have uncertain origins, and four are thought to be imports). By contrast, only seven fragments of driven-ox groups are known, six of which are imports.

With respect to the large figures, the difficulty in dating based on context was noted above and the unique character of local products prevents dating on stylistic grounds (*i.e.*, with reference to Mycenaean styles). The bovine figures, virtually all of which come from the area of the Sanctuary at Phylakopi, are equally difficult to date but exceptions exist. For example, the painted designs on SF 2689, a mainland import, suggest a LH IIIB date (French 1985, 238–239). The majority of well-preserved bovine figures are locally made and are not necessarily indebted to Mycenaean prototypes, yet as French (1985, 238) has noted, there is “no reason to believe that the tradition of making larger bovine figures ... continued uninterrupted throughout the LBA”.

### Conclusions: Minoanisation and Mycenaeanisation Compared

Using the concept of entanglement as a heuristic, the preceding examination of evidence for Minoanisation and Mycenaeanisation on Melos has shown that the reception of foreign objects and practices varied. Some things were imported only, others were reproduced faithfully on Melos, and others still were adapted from their foreign prototypes to create something new. This study, with its emphasis

on understanding objects through their construction and contexts, affords a unique opportunity to compare and contrast in detail the phenomena of Minoanisation and Mycenaeanisation as they are known from LBA Melos. Let us conclude, then, by briefly readdressing the categories of evidence discussed above – architecture, ceramics, cult objects, personal adornment, and administration – so that we may define, and begin to explain, the two phenomena’s similarities and differences.

In terms of architecture, the general patterns of Minoanisation and Mycenaeanisation are similar. The few buildings of foreign type – namely the Pillar Rooms Complex, Megaron, and West and East Shrines – can be associated with elites and/or cult practices. All have refined construction techniques and forecourts that communicate their special character. Yet despite these similarities, differences in the circumstances of their appropriation are evident. The Minoan-style PRC, in both its form and function, has Cretan antecedents, whereas the relationship between the Megaron and West and East Shrines with their mainland counterparts is less clear. In fact, the approximate contemporaneity of the Melian and mainland examples allows for the possibility that Melians were actively engaged with mainland Mycenaeans in formulating an architectural vocabulary for symbolic structures at the beginning of the Mycenaean palatial period in LH IIIA. A further distinction between the two phenomena exists in the nature of these buildings’ decoration: the PRC is replete with ornamental and figural wall paintings and LC I–II fresco fragments are known from elsewhere in the town; by contrast, the Megaron and shrines have only monochromatic plaster. The

appearance of Minoan-style wall paintings at Phylakopi is paralleled at sites throughout the southern Aegean, while the absence of Mycenaean-style frescoes mirrors their concentration at Mycenaean palatial centres and may reflect palatial control over the activities of painters.

Ceramics constitute the most numerous and diverse body of evidence with bearing on Minoanisation and Mycenaeanisation. Wide ranges of both Minoan and Mycenaean imports are known, including those for drinking, serving, storage, and ritual use, but Mycenaean imports in LC II–III constitute a much higher proportion of the Melian assemblage (from trench PLa) than Minoan imports in LC I. A range of Minoan shapes is known to have been produced locally; study of the Mycenaean shapes made in Melian wares is underway but the fragmentary nature of the stratified sherd material recovered from Renfrew's excavations makes precise identifications difficult. The manufacture of Minoan-style vessels on Melos was facilitated by the adoption of the potter's wheel from Crete in the late MBA, whereas no technological innovations are known to have accompanied the imitation of Mycenaean ceramics. Moreover, while distinct local fabrics (*e.g.*, Later Local, Hard Buff and Hard Painted Domestic wares) were developed in order to imitate both Minoan and Mycenaean imports, there appears to have been different relationships between imports and local imitations: an inverse correlation between the numbers of Minoan imports and local imitations is evident but Mycenaean imports and local imitations saw a concomitant rise.

Both Minoanisation and Mycenaeanisation are evident in the cult objects found at Phylakopi. Local production of terracotta bovine figures in MC–LC I and LC III is notable and may reflect general inspiration from Crete and the Greek mainland, respectively. In both periods, however, direct links are difficult to establish. Minoan and Mycenaean human figures and figurines are also attested but to different degrees. Very few Minoan or Minoan-style examples are known from MC–LC I contexts. Given the concentration of Minoan figurines and figures on Crete at cave and peak sanctuaries, their virtual absence from the town of Phylakopi is not surprising and raises the possibility that their 'Minoan' use was known and followed. By contrast, a number of Mycenaean and Mycenaean-style figurines are known from various LC III contexts at Phylakopi, mirroring their distribution, and perhaps uses, on the mainland. Rhyta were used throughout the LBA but not in the usual Minoan or Mycenaean ways. Minoan-style rhyta are often found associated with tripod offering tables and conical cups, an assemblage without precedent on Crete. While several examples of the standard Mycenaean conical rhyton are known from the town, none were found in the Sanctuary. Instead, only a possible fish-shaped rhyton (SF 1087), probably an import from the Argolid, was found in the courtyard (French 1985, 275; Renfrew 1985, 374)

and fragments of a likely ostrich egg rhyton were found in the East Shrine (Renfrew and Cherry 1985, 324; Koehl 2006, cat. no. 189). The absence of conical rhyta from the Sanctuary contrasts with the evidence from Mycenaean sanctuaries on the Greek mainland (Koehl 2006, 322, 324–325, 367). Offering tables are known from LC I–II contexts across the site but not from LC III contexts – a divergence from practices on the mainland, where such tables are not uncommon in Mycenaean cult buildings (Whittaker 2004, 101; the Phylakopi example Whittaker mentions is uncertain according to Renfrew 1985, 340).

While there is clear evidence for the Minoanisation of personal adornment at Phylakopi in the late-MC adoption of the warp-weighted loom from Crete in order to produce Minoan-style pattern-woven garments, evidence for technological adoptions from the mainland is less clear. Minoanising discoid loom weights continued to be used in LC III, although three examples of mainland types suggests the transference of at least some weaving equipment. Likewise, the appearance of Mycenaean 'buttons', possibly small spindle whorls for spinning fine threads, may signal a Mycenaean-inspired technological change. Although the use of dress pins on Melos finds parallels on the Greek mainland, the similarities more likely stem from a common origin earlier in the Bronze Age than represent the Melian adoption of a Mycenaean object and practice; the same may be said about the evidence for weaving on the horizontal loom.

Lastly, with regard to administrative practices, the use of the Minoan Linear A script in the early LBA at Phylakopi contrasts sharply with the absence of Mycenaean Linear B in LC III. Minoan literacy appears to have been widely spread in the southern Aegean in the early LBA (*e.g.*, Owens 1999), and the absence of Linear B from Melos accords with the restriction of Mycenaean inscriptions to major mainland and Cretan centres in LH IIIA–B (Krzyszowska 2005, 284). The absence of sealings suggests that seals were not used for administrative purposes at Phylakopi in the LBA: a break from typical Minoan practices but in accord with the restricted distribution of Mycenaean sealings.

Are Minoanisation and Mycenaeanisation on Melos two sides of the same coin? If this question is meant to gauge if Minoan and Mycenaean objects and practices are evident across the same range of material, then the answer is yes. Yet, as is often the case with coins, differences exist between the two sides. The dissimilarities in Minoanisation and Mycenaeanisation noted above may be attributed to differences between Minoan and Mycenaean palatial societies. As I have discussed elsewhere (Earle 2012, 16–18), the emergence of palatial societies on Crete from non-hierarchical 'tribal' groups contributed to their corporate organisation, while the hierarchical Mycenaean palatial states on the Greek mainland developed from societies in which social status was linked to economic control. These differences are borne out in the archaeological record by the

distribution of wealth and prestige items/architecture, such as architectural features, ceramics, cult objects, personal adornments, and administrative tools. These objects, through their interactions with people, reinforced and perpetuated social norms (*i.e.*, they materialised ideologies), largely to the benefit of elites. Thus we must consider that the native cultural context and significance a Minoan or Mycenaean object conditioned what an individual on Melos might have wished to, or even been able to, acquire or imitate. Indeed, Davis and Gorogianni (2008) and Feuer (2011) have framed Minoanisation and Mycenaeanisation, respectively, as largely elite phenomena and indeed, with respect to Melos, much of the evidence can be linked with elites. The numerous imported ceramics and their local imitations (and perhaps also the terracotta figurines), however, speak to a broad consumer base. These objects therefore may best be appreciated in terms of Sherratt's (1999, 185–187) concepts of sub-elite and substitute elite goods, wherein products served as acceptable 'placebos' for social groups of limited means or sub-elite status, or as substitutes for prestige goods in situations where sumptuous outlays by elites were unnecessary or prohibited. The two are often difficult to distinguish archaeologically. Whether import or local imitation, prestige item or sub-elite/substitute elite good, foreign and foreign-inspired objects were likely used in order to speak with the then-current vocabulary of power in the Aegean.

Rather than arguing for Melian political autonomy or Minoan/Mycenaean conquest in the LBA, I have focussed on the lingering effects of inter-cultural contacts (in whatever form they occurred). By examining diachronically the manufacturing techniques and depositional contexts of Minoan and Mycenaean objects and their local imitations, I have made evident changing methods of production and patterns of consumption and use on Melos. In turn, much has been learned about the who, what, when, where, how and why of Minoanisation and Mycenaeanisation. The breadth of material covered here has necessarily limited the depth of the discussion – more can surely be said about each category of evidence, type of object, period and context. Therefore it is hoped that this study provokes further consideration of the finds from Phylakopi and that even greater insight into the cultural transformations that occurred on Melos during the LBA may yet be achieved.

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# NEITHER FAR FROM KNOSSOS NOR CLOSE TO MYCENAE: NAXOS IN THE MIDDLE AND LATE BRONZE AGE AEGEAN

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Dedicated to Professor V. Lambrinoudakis as *avtīðωρον* of gratitude and profound esteem.

## Introduction

The responses of the communities on the island of Naxos to the dynamic processes taking place during the Early Cycladic (3rd millennium BC) and the Late Mycenaean (1400–1050 BC) periods have been well represented in the scholarly literature. Unfortunately, the same cannot be said for the Middle Cycladic (2000–1600 BC) and the early Late Cycladic (1600–1400 BC) periods. Even though it is a period of high archaeological visibility for the Cyclades as a whole, as well as of prosperity and contact with the communities of palatial Crete, on Naxos it is represented patchily to say the least. This paper draws primarily on material evidence of the diachronic development of the coastal settlement at Grotta, as well as of other sites on the island (*e.g.*, Mikri Vigla, Zas Cave, Ailas), and attempts to fill in this lacuna and explain this conundrum by adopting a synthetic approach.

Aegean scholars have often sought to interpret the interaction of cultural phenomena in Crete, the Cyclades and Mycenaean Greece through the application of sets of criteria and models. Naxos is a prime example of the significant difficulties in the application of these models, especially the application of the core and periphery model. This paper discusses the phenomena of ‘Minoanisation’ and ‘Mycenaeanisation’ on the island, and demonstrates that these processes never resulted in a ‘de-Naxianisation’.

## On the Use of Terms ‘Minoan’/‘Minoanisation’ and ‘Mycenaean’/‘Mycenaeanisation’

The tendency of contemporary archaeology to attribute to extraneous geographical and cultural factors the qualitative

profile of a place reflects the researchers’ desire to ‘read’ the data for that place by focusing on and magnifying the traits of the influences it has received, because these are easily identifiable. This is usually the case for small territories that are compared with larger and more powerful places, of which the culture has been studied in greater depth, the societies are better known and the historical parameters have been imprinted on the monuments, the environment and, more rarely, the scripts.

Following the chronological sequence with which the cultures of the second millennium BC in the Aegean islands (particularly the Cyclades and the Dodecanese) were studied and named, in some places the ‘Minoan’ phase was identified, in others the ‘Mycenaean’, and elsewhere both, where the architecture, but mainly the pottery, the figurines, the stone vases and the wall-paintings, added analogous similarities during the middle and late centuries of the second millennium BC, respectively.

It is worth mentioning that the early archaeology of the Cyclades faced with ‘embarrassment’ the terminology that should be applied for the prehistory of the islands. Chr. Tsountas (1898; 1899) proposed the geographically correct term ‘Cycladic’ for the 3rd millennium BC grade, but R. Atkinson and his colleagues distinguished the finds from the systematic investigation of Phylakopi (1896) as ‘Mycenaean’ and ‘pre-Mycenaean’ (Atkinson *et al.* 1904; Barber 1974). The term ‘Mycenaean’ was already authoritative enough twenty years after Schliemann’s excavations at Mycenae, but the term ‘Minoan’ was not still synonymous with Cretan prehistory – even though it had been introduced long before (Karadimas and Momigliano 2004, 245; Papadopoulos 2005).

The terms for the periods of antiquity are, of course,

conventional, even for historical times. The naming of a period assists the methodology and functions as a tool for testing the archaeological material, rather than conveying the actual historical, political and cultural identity of each period. For the ‘Minoan’ or ‘Minoanising’ phase of the Aegean islands, considerable weight was attached to the historical evaluation of Thucydides, who in the first book of his *Historiae* (1.4) states that Minos was the first (*παλαιτάτος*) to rule the seas and that Crete was an all-powerful naval empire of a wide island realm. So, on the one hand the modern conventional evaluation of the archaeological corpus, and on the other the important (but a product of oral knowledge during the 5th c. BC) source of Thucydides, add a very frequently ‘political’ nuance to the finds of ‘Minoan’ inspiration or provenance in the islands (Niemeier 2009a, 12–15; Doumas 2012, 27).

From the early use of the term ‘Minoisation’ (Evans 1925, 45, 75) and its contemporary lexicological abuse in the bibliography (cf. Doumas 2012, 26, 27), until the quest for the corresponding cultural phenomenon of ‘Mycenaeanism’ (Barber 1999, 139), the study of the early Aegean seeks to interpret through criteria and models the interactive development of the cultural phenomena in Crete, the Cyclades and Mycenaean Greece, and the reciprocal influences between them. Focusing on the ‘capitals’ (Knossos and Mycenae) and seeking the associated estates (Minoan palaces in Crete and Mycenaean palaces on the south Greek Mainland), the researcher determines the degree of power of each ‘periphery’ he wishes to study (Wiener 2013, 150), but when the discussion turns to the multi-island Aegean and the Cyclades, the quest both for the criteria and the application of the interpretative models proves to be even more awkward (Schofield 1984, 45; Barber 2010; Feuer 2011, 527–528).

In 1979, J. Davis introduced the geographical distinction of the Western Cyclades (Kea, Melos, Thera) with regard to the degree of Minoanisation of these islands, speaking about a ‘Western String’ of common interests and contacts with palatial Crete (Davis 1979; see also Davis 2008, 186–189, 193–197; Davis and Gorogianni 2008), which leaves the rest of the Cycladic islands relatively unaffected by the phenomenon. Having studied Kea (Ayia Irini) and Melos (Phylakopi) himself, islands excavated by American and British archaeologists respectively (Atkinson *et al.* 1904; Davis 1986; Renfrew *et al.* 2007), Davis read rather one-sidedly the archaeological book of the Cyclades, attributing to prehistoric networks of contacts the modern ferry routes in the Western Cyclades, as C. Doumas (2006) humorously rejoined. Some time later (1984), M. Wiener had ingeniously coined the term ‘Versailles effect’ for gauging the influence of the Minoan civilisation on the periphery, that is, the emulative appeal the powerful centre held for the periphery or the provinces (Wiener 1990; 2007; 2013; see also Wiener 1991; Niemeier 2009a, 12).

In recent years, particular emphasis has been placed in the bibliography on ‘Minoanisation’, a term rekindled mainly by C. Broodbank (2004), with regard to the islands north of Crete, testing its durability as far as Samothrace (Matsas 1991; 1995), Lemnos (Boulotis 2009; Cultraro 2009) and the Dardanelles (Troy: Guzowska 2009), where finds of Minoan character have been brought to light (see also, Berg 2007, 61 seq., 73 seq.; Girella and Pavuk 2015). The search for ‘Minoanisation’, however, spreads to every island group of the Aegean, such as Aegina (Gauß 2006).

‘Mycenaeanism’ is an earlier term in research, which concerned the corresponding phenomenon during the so-called Achaean takeover of Crete, but in recent years it too has spread its territory throughout the Aegean, and indeed is the historical and cultural counterpoint to ‘Minoanisation’. For the islands, the term ‘Mycenaeanism’ renders the homogeneous spread of Greek Mainland (Helladic) material culture from the 14th c. BC onwards, but it still needs to be elucidated whether the Mycenaean presence in the Aegean was racial-ethnic, political, economic or only cultural (Schallin 1993, 172–187; Barber 1999, 139; Feuer 2011, 527–528). Indicative is S. Vitale’s approach (“Minoanisation and Mycenaeanism at the Serraglio on Kos. A Comparative Analysis”, Minoan Seminar 26.4.2013; cf. Vitale and Hancock Vitale 2010; Vitale, this volume) concerning the monitoring of the two phenomena in the settlement at Serraglio on Kos, a diachronic palimpsest of human habitation, analogous to Grotta on Naxos. However, so crushing are the two terms that one wonders whether under the mass of ‘Minoanisation’ and subsequent ‘Mycenaeanism’ there was any breathing space on Kos to record the local development of its prehistory. Analogous models of interpretation have been applied recently for the examination of the opposite coast of Asia Minor, on sites such as Iasos and Miletus (Niemeier 2009a, 17–18; 2009b; Momigliano 2009; Davis 2008, 198–199; Benzi and Graziadio 2013).

## The Early Bronze Age in Naxos

The aim of the present article is to examine synoptically the archaeological evidence of Naxos and to discuss the criteria under which the terms ‘Minoan’, ‘Mycenaean’, or ‘Cycladic’ could be applied to its cultural outcome, as far as the objective archaeological picture can transcend the lack of systematic excavations (Sotirakopoulou 2010, 826).

The Cyclades, and especially Naxos, were a place of neuralgic importance for cultural developments in the Neolithic and the Early Bronze Age Aegean. On Kokkinovrachos at Grotta a flourishing settlement existed by the mid-fourth millennium BC (Final Neolithic period) (Hadrianastasiou 1988; 1989, 206–207 fig. 1; Philaniotou 1988–89), which developed into one of the most dynamic centres of the Early Cycladic culture, as the remarkable

wealth of the cemetery at nearby Aplomata shows (Marangou 1990; Lambrinoudakis and Doumas forthcoming).

The third-millennium BC sites on Naxos constitute a very dense constellation of settlements, mainly coastal and to a lesser extent inland, with the maximum concentration in the fertile areas with relatively sheltered havens, on the west and the south-east coast (Angelopoulou 2014, 17, fig. 1.1). Although the bulk of Early Cycladic material comes from looted cemeteries, the distribution of the grave clusters on the island testifies to the density of the settlement pattern, particularly during the EC II period. The lack of excavated settlements in the Naxian countryside is offset by the exceptionally important fortified building for community activity at Panormos on the east coast, which was excavated by C. Doumas and is being published by N. Angelopoulou (2014), documenting the robust local cultural traits of Naxos and attributing to it a course in its own right during the third millennium BC (see also Angelopoulou 2003, 170–171; 2008, 150–151; 2010, 16). The data extracted from the study of Panormos (independent character of the local pottery production, technological superiority of the bronze artefacts, imports etc) as well as the preliminary data from the Zas cave (seal impressions related to a distributional system in the economy of the island: Zachos and Dousougli 2008, 85–86, 92–93, fig. 10.1, 10.8–12) shed light on EBA Naxos as a whole and demonstrate the strong ‘Naxian’ physiognomy of the island during the third millennium BC. EC III is not yet attested in settlements on Naxos and only surface finds dated to EC IIIB (Phylakopi I phase) are reported from the Kalandos area (Hadrianastasiou 1989, 206).

In the same period (EM II–III), the spacious and fertile ‘land’ of Crete, thanks to its strategic geographical position, is developing a dense network of contacts with the Cyclades and the East under the control of local elites, that will soon formulate the earliest ‘Pre-palatial’ features in the culture of the island (Wilson 2008, 100; Tomkins 2012). The gradual emergence of the ‘Minoan Civilisation’ around 1900 BC (MM I period) will give birth to the first palaces that were founded at Knossos, Phaistos and elsewhere in Crete. These highly complex administrative mechanisms of collecting and stockpiling goods profited from the island’s rich production and recorded it – for the first time in the Aegean – in script systems for keeping accounts. The second and more mature phase of the Minoan Civilisation (MM IIB–LM IB) is linked with the zenith of the palatial system, with sophisticated architecture and decorative arts, and with the radiation of Minoan culture (or fashion) to the Aegean islands, which is perceived by many scholars as their ‘Minoanisation’. For some of the islands, such as Kythera and Rhodes, however, the involvement with Crete had started long before, in EM II and MM II respectively (Wilson 2008, 79, 92, 96; Davis 2008, 198), under diverse circumstances and aiming at different politics.

## The Role of Thera

The effect of the New Palace Period culture of Crete was indeed catalytic on the neighbouring Dodecanese and the Cyclades, but the islands were enhanced first and foremost as intermediate ports-of-call in an international network of contacts and exchanges that spread from Italy to Cyprus and to the North-Eastern Aegean islands (Macdonald *et al.* 2009). Seafaring necessitated a high level of shipbuilding and the demands of intra-Aegean and international barter trade gave significant impetus to the islands, which enjoyed a heyday, presumably because they provided services and nautical know-how to their wealthier neighbours. The harbours of the largest islands (such as Kea, Melos, Thera) became melting pots of commodities, people and cultures, as the evidence from Akrotiri clearly shows.

Situated on the southernmost coast of Thera, at a visible distance from many of the Cyclades but also from Crete, this well-organized city with a highly cosmopolitan air received many influences from Minoan culture, and it assimilated these fruitfully in its art. Despite the enhancement of its pronounced local-Cycladic features during the ripe Middle Cycladic and LC I/LM IA period, for some scholars Akrotiri remains a ‘Minoan colony’ (Wiener 1990; 2007; 2013; see also Branigan 1981; Poursat 2008, 250; Knappett and Nikolakopoulou 2005; 2008; Niemeier 2009, 15–16). The influence that Neopalatial Crete exercised on Thera can be located in the architecture and the mural paintings, the pottery styles and the means of administration (Karnava 2008; in press), but the evidence is far from proving Thera as the insular port-of-call (*επίνειον*) of Knossos (Poursat 2008, 250; Doumas 2012).

The most possible ‘scenario’ is that Thera was providing mercantile sea services to Crete a long time before the New Palace period and that an advantageous relationship developed for the benefit of both islands. Of special importance is the fact that, while these reciprocal contacts are testified through MC Theran pottery exports to Crete (Kriga 2012, 633–634), in LM IA only Crete continues to export systematically its pottery to Thera.

The amount of the ‘Minoan’ and the volume of the ‘Minoanising’ elements of the pottery from Akrotiri, once considered to be numerous and mainly Knossian in origin, now testify to a large variety of local Cretan workshops along with other island and mainland pottery production centres active in exporting to Thera (Knappett and Nikolakopoulou 2008; Hilditch 2008; Knappett *et al.* 2011; Kriga 2012; Mathioudaki 2014; Mathioudaki and Nikolakopoulou forthcoming), with Naxos being one of major importance, as we shall see. The emergence of the art of wall-painting on Thera, on the other hand, seems to have been assisted by the rich local MC iconography and also to have developed some strong ‘Cycladic’ idiosyncrasies (Vlachopoulos 2013; 2015; see *contra* Nikolakopoulou

forthcoming); nevertheless the LC I murals that adorn the private houses and the luxurious public buildings of Akrotiri are not of less palatial character, compared to the ones from Knossos and Ayia Triada.

Thus, Akrotiri clearly develops dynamic relations with several centres of Crete, while the dense contacts that the island manages in parallel with the Cyclades and the Greek Mainland demonstrate that Thera is successfully balancing its geographically advantageous position in the southern Aegean.

### The Evidence of Naxos: Late MBA and Early LBA

For the periods late MBA and early LBA, the scant information we have about Naxos is due to the lack of systematic excavations. Survey findings clearly prove that the island was inhabited without a break during the first half of the second millennium BC and rather densely, assisted by its geomorphology, abundant natural resources and products (minerals and agricultural products), and its relations with the many islands close to it (Cosmopoulos 1998, 141, fig. 13).

At Mikri Vigla, an exposed windswept crag on the west coast, flanked by a cove on either side, a settlement developed that had forged relations with Melos, Thera, mainland Greece, as well as MM III Crete (Barber and Hadjianastasiou 1989; Vaughan 1989; Hilditch 2008, 99), as the pottery imports indicate. Anthropomorphic figurines modelled from Naxian clay (Fig. 7.1a–b), found over a large area around a stone construction on the hilltop, possibly

attest the existence of a sanctuary, which perhaps contributed to the settlement's heyday until LC II/LM IB, as suggested by the excavators of the site, O. Philaniotou-Hadjianastasiou and R. Barber (Barber forthcoming b). However, there is a great difference indeed between the identification of open-air cult on a hilltop and the misguided inclusion of Mikri Vigla among the 'peak sanctuaries' outside Minoan Crete, which has been proposed since then (Sakellarakis 1996, 96–97; 2013, 159–162, fig. 64; Sotirakopoulou 2010, 830–831, 837). Certainly more significant was the role Mikri Vigla played "as a node within Cycladic interaction networks" (Hilditch 2008, 292), handling for export not only Naxian raw materials and products, such as marble, emery and pottery, but also developing a privileged relationship with Akrotiri and with other vital sites in the intra-Cycladic network of contacts and transactions.

The Middle Cycladic (MC) finds from various sites that are mentioned epigraphically in earlier publications, are few and all from surface collection. From the natural citadel of Rizokastellia, MC and LC sherds are reported (Renfrew 1972, 518), and remains of walls have been observed (Hope Simpson and Dickinson 1979, 328; Fotou 1983, 46; Vlachopoulos 2012, 348). A LM I/II(?) sealstone (Fig. 7.2) depicting a group of fish (reminiscent of those of 'talismanic' style) has been collected from the nearby site of Stavropigi, at Tripodes (Pini 2004, 386, no. 242), forming a pattern of hilly settlements that were overlooking Livadi – the most fertile valley of the Cyclades that could guarantee autarchy and agricultural surplus for a large number of communities.

Surface MC pottery is noted from Petasi (Renfrew 1972, 519, n. 32; Fotou 1983, 35, 47), on the East coastal

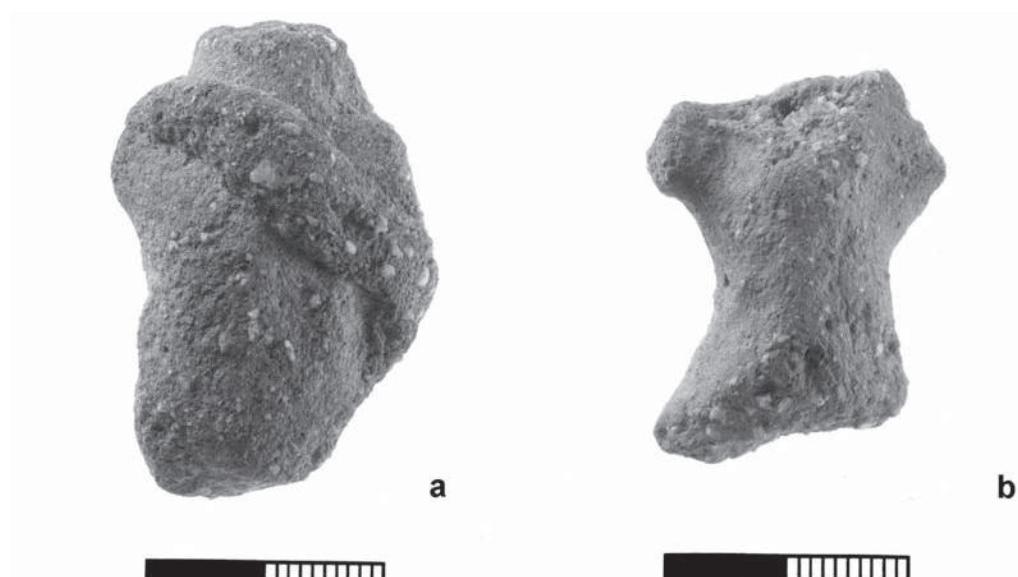


Fig. 7.1a, 1b: Mikri Vigla. Anthropomorphic clay figurines from the hilltop. Naxos Archaeological Museum. (Courtesy: O. Philaniotou – R. L. N. Barber).

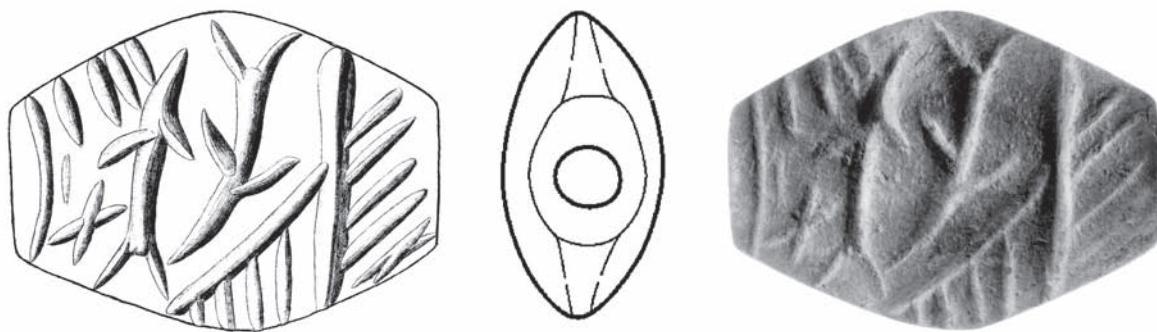


Fig. 7.2: Stavropigi, Tripodes. LM I-II(?) stone seal with fish and linear motifs. Naxos Archaeological Museum. (Courtesy: CMS).

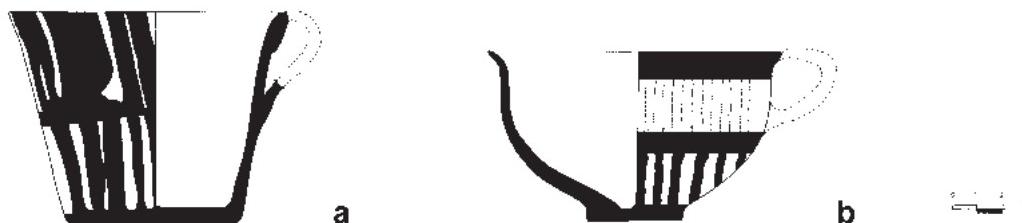


Fig. 7.3a, 7.3b: Ailas. MM III-LM I cups with ripple decoration. Athens, National Archaeological Museum. (Courtesy: E. Karantzali).

zone of the island. Two Minoan style Vapheio and semi-globular cups of the MM III–LM I period, decorated with tortoise-shell ripple pattern, were unearthed, along with other ‘Minoan’ monochrome conical cups, from a single grave of the prehistoric (EC–MC) cemetery at Ailas near the Cheimarrhos Tower (Papathanasopoulos 1963, 130–131, pls. 63–64; Karantzali 1996, 24, fig. 12, 24A; Marthari 2009, 43–44, fig. 1) (Figs. 7.3a–b). Even so, it is interesting that although the Middle Bronze Age is considered to be “turned southwards”, towards Crete, the centre of gravity of the sites on Naxos was shifted to the northwest and central parts of the island. Far more promising are the recent (2010–2014) excavations, limited but with important finds, such as fine decorated MC pottery from graves at Ayios Myronas (Louros) of Sangri, and other sites on the island (Legaki forthcoming; Legaki and Mavroeidopoulos forthcoming a; forthcoming b), also pointing to the dense habitation of Naxos in the Middle Bronze Age (Fig. 7.4). Lastly, the publication of the MBA levels from the meticulously excavated Zas Cave is awaited with interest, where there are very few Cretan imports in phase V (Hilditch 2008, 99; Barber forthcoming a).

Grotta, the North shore of Naxos’ Chora, was systematically inhabited in the MBA, but the settlement did not probably expand to Palatia (the promontory of the archaic temple of Apollo that forms the Western limit of the Grotta coast), since MC pottery is very poorly represented there (Welter 1930, 134). The MC finds from Grotta’s settlement nucleus, excavated in 1949–1985 by N. Kontoleon and V. Lambrinoudakis, are piecemeal

because they are now under water (Lambrinoudakis and Philaniotou-Hadjianastasiou 2001; Cosmopoulos 2004; Vlachopoulos 2003a; 2008; 2012, 345–346). Linked with the Middle Cycladic period, however, is a very small part of a wall with two important finds: a beak-spouted MC II jug (Fig. 7.5) imported from Melos, and a Grey Minyan sherd with one incised symbol-sign, also paralleled in the Linear A script (Kontoleon 1965), but is also a common potters’ mark in the Aegean in this period (Karnava 2008). The presence of Grey Minyan ware of mainland character in Naxos (Cosmopoulos 2004, 75; Vlachopoulos 2012, 383), although in small quantities, deserves further study, since this phenomenon is also attested in the Cyclades (Kea – Ayia Irini IV: Overbeck and Crego 2008, 304–305, fig. 31.3; Melos – Phylakopi Phases C–D: Dickinson 2007, 237–238, figs. 6.16–6.19) and Crete (Dickinson 2007, 242–244; Nikolakopoulou 2007; Girella 2009), and has been considered as echoing the degree of contacts with the Greek Mainland (Sotirakopoulou 2010, 833–834).

The most important inscribed find in Linear A script, which links Naxos directly with the nucleus of the Neopalatial elite, comes from Knossos and the Temple Repositories of the Central Palace Sanctuary. Recently, K. Christakis has demonstrated as very probably Naxian four pithoi, the content of which (wine) is recorded in an inscription on the rim of one of them (Christakis 2010). The large quantity of wine recorded (117 units, estimated to correspond to 3,369 litres) clearly does not refer to the capacity of the inscribed pithos, but corresponds to a larger inventory or order of wine, which, in all likelihood as a dedication to the

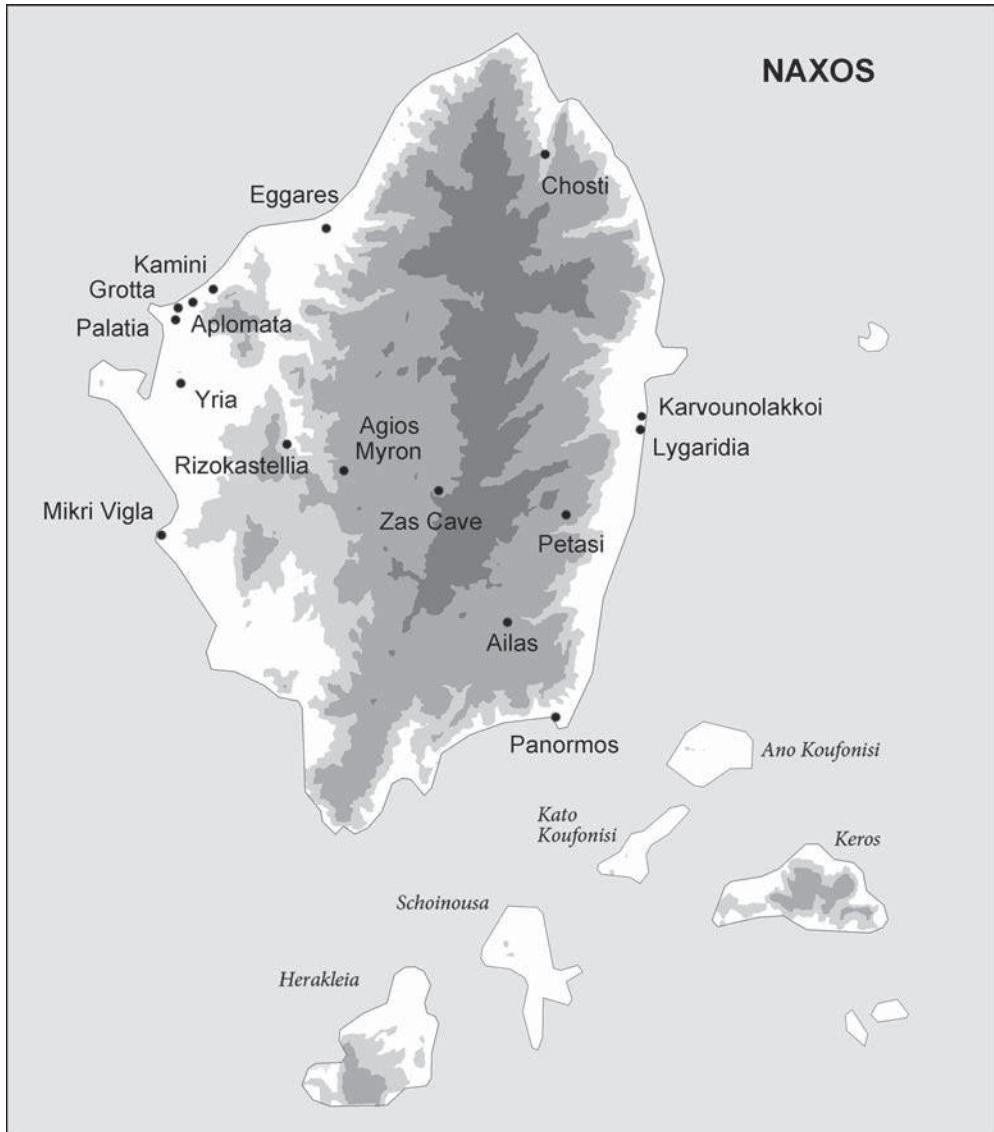


Fig. 7.4: Map of Naxos with the Early, Middle and Late Bronze Age sites discussed in the text. (Drawing: K. Birtacha).

large palatial shrine, aligns Naxos historically with MM III Knossos (Christakis 2010, 52). Indeed, the identification of more vases of Cycladic provenance in the magazines and the shrines of the palace (Christakis 2010, 53–54) in numbers greater than for any other centre in Crete points to a very wide-cast network of contacts between the islands of the South Aegean-Cyclades and Crete during the Neopalatial period (Hilditch 2008, 96; see also MacGillivray 1984; Barber 1978; 1987, 154; Knappett 2006).

The attribution of the inscription on the pithos in the Knossian shrine to Naxos (or a nearby isle) creates new circumstances for the diffusion of the first system of bureaucratic records outside Crete, particularly as the few (about 23) such finds to date from the Cyclades (Ayia Irini

on Kea, Akrotiri on Thera, Phylakopi on Melos) are hardly illuminating as to the kind of dealings to which they were referring (Karnava 2008). Based on the increasing presence of Cycladic commodities in the heart of the “Minoan Empire” (Wiener 2007), could one reverse the scholarly trends of ‘Minoanisation’ and ‘Mycenaenisation’ and humorously talk about the ‘Cycladisation’ of Knossos? For Minos’ sake, no! Pots do not equate to people and, as C. Doumas (2012, 27) puts it, “imports of any kind can never prove the physical presence of their producers nor can any cultural influence imply political domination” (*cf.* Poursat 2008, 250).

Correspondingly illuminating was the recognition of Naxian vases in the Middle Cycladic and LC I levels at

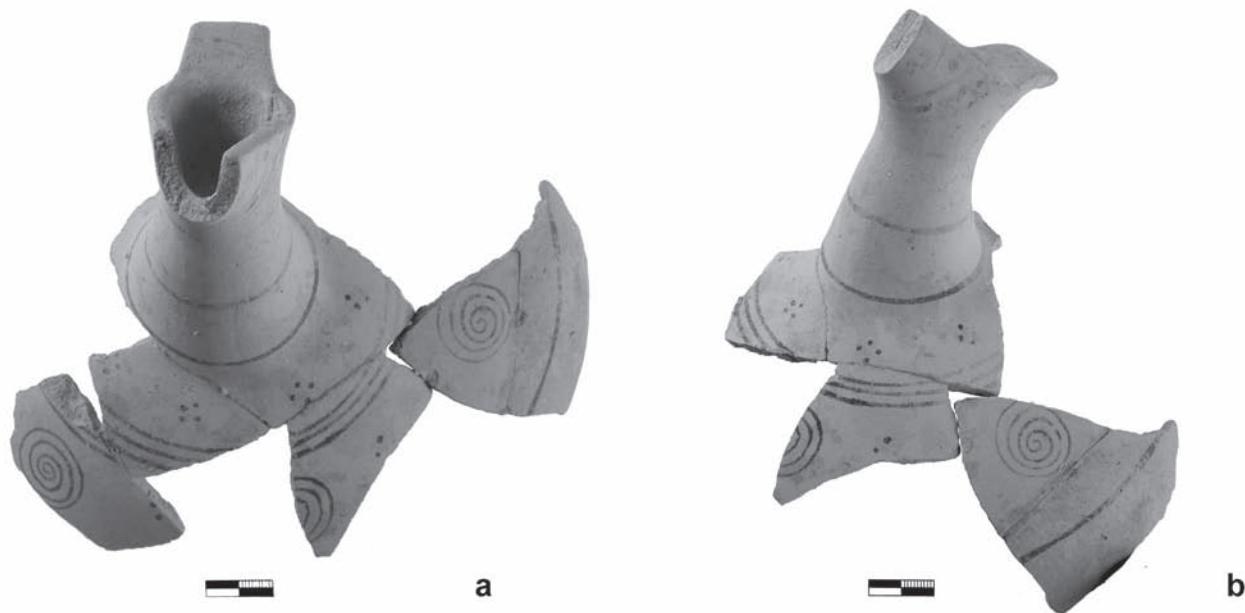


Fig. 7.5: *Grotta. Middle Cycladic II beak-spouted jug. Naxos Archaeological Museum.* (Courtesy: the Archaeological Society of Athens).

Akrotiri, Thera (Hilditch 2008, 99, 233, 288; Knappett *et al.* 2011), where, however, imports of Naxian pottery are attested from the Early Cycladic period (Vaughan 1989). The impressive, recently documented, high proportion of vases imported from Naxos at Akrotiri is as much as 10% in the horizons of MC phase C (corresponding to MM IIIA: Knappett and Nikolakopoulou 2008, 3, Table 1), according to the study by J. Hilditch (2008), while particularly interesting is the ascertainment that Naxian vases (domestic-storage, cooking, transport and fine ware) come from many centres on the island, which is documented indirectly as densely inhabited. This high proportion evidences “a strong and possibly special relationship between Naxos and Thera during this period, only paralleled by the Cretan imports within the assemblage”, Hilditch (2008, 99, 233, 288–292) comments.

The aforesaid picture would offer persuasive arguments for including Naxos in the Cycladic network of the ‘Western String’, particularly when modern research shows the once dominant role of Melos in relations with Crete losing ground and that of Naxos escalating, both via Thera and directly with Crete. Thus, the earlier view of certain scholars (Barber and Hadjianastasiou 1989; Broodbank 2004) that the ‘Western String Theory’ was selective and obsessive with regard to its component islands, and dismissive with regard to the role of most islands of the Cyclades in their participation in corresponding networks of contacts and reciprocal influences, is vindicated (Cosmopoulos 1998, 127–128, 141–143; Berg 2007, 73; Hilditch 2008, 300).

With the Middle and the early Late Bronze Age still unknown on many islands of the Cyclades, and some of these, such as Andros (Televantou forthcoming),

Gyaros (Marthari forthcoming), Antiparos (Papadopoulou forthcoming) and Ios (Marthari 2008) very recently shown through excavations to be important poles of dense intra-Aegean contacts, the ‘String Theories’ have weakened to the point of collapse. I would go so far as to predict that in a few years’ time they will have been eliminated from the bibliography. It seems that already from the early centuries of the Middle Cycladic period the islands of the Cyclades, depending on the power and profile of each, contributed to the formation of a strong ‘Pan-Cycladic String’, which, developing spirally, transmitted its multi-island dynamism towards the ‘continent’ of Crete, which served its own interests affiliated at a distance rather than spatially and politically expanding.

How might a model of ‘spiraliform development’ of the islands work? It is premature to claim that the dawn of the second millennium BC finds the Cyclades receptive of a homogeneous cultural ‘affiliation’. At the time that the First Palaces develop into a powerful system of Cretan estates, it is highly probable that Kea, Paros, Naxos, Melos and Thera (to name the larger and the more fertile among the islands) reorganized their major urban centres as “maritime insular capitals” in order to control the ports in which the sea routes connecting the opposite coasts of the Aegean with Crete were intersecting. With each island-in-power being the core of an autonomous entity that was exercising a ‘proto-polity’ over the lesser islands of its vicinity, these ‘island-estates’ were developing into a spiraliform insular constellation, which in later times (and inspired by their ‘cyclical’ arrangement) will be imprinted with the group name Cyclades.



Fig. 7.6: Grotta, Dimitrokalis plot. Fragments of a LM IA Reed-painter vase. Naxos Archaeological Museum. (Courtesy: O. Philaniotou).

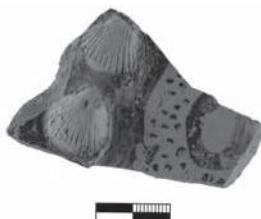


Fig. 7.7: Grotta. LM IB vase Knossian(?) decorated with relief shells. Naxos Archaeological Museum. (Courtesy: The Archaeological Society of Athens).



Fig. 7.8: Grotta, Dimitrokali plot. LC / LM IB bridge-spouted jar. Naxos Archaeological Museum. (Courtesy: O. Philaniotou).

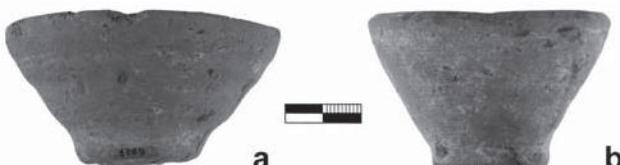


Fig. 7.9: Grotta. Conical cups made of Naxian clay. Naxos Archaeological Museum. (Courtesy: The Archaeological Society of Athens).

The glow that the palatial civilisation of Crete emitted, and the fashions that ‘Minoan culture’ formed, justify the measure of their influence on the Aegean islands and reinforce the attraction that Crete was exercising traditionally on its Cycladic neighbours, as a kind of “Promised Land” (Doumas 2012, 27) in terms of self-sufficiency and economic potential.

### Naxos in the Late Bronze Age: The Grotta Sequence

The ‘behaviour’ of the major urban centre of Naxos and of its depending lesser islands (Μικρές Κυκλαδες / Small Cyclades) in the mid-second millennium BC (early Late Bronze Age period) gives a tangible example. In the westernmost part of Grotta (Dimitrokalis plot), O. Philaniotou-Hadjianastasiou uncovered a barely-known find of the German excavations by G. Welter in the 1930s: the paved street of the early Late Cycladic period, which linked the two harbours of Naxos and delimited massive strong constructions, perhaps public buildings (Hadjianastasiou 1989). In that period (LC II/LH II/LM IB), Naxos was highly familiar with the products of Minoan Crete and of Mycenaean Greece, participating in a complex network of contacts and communications, equally Minoan and Mycenaean-Helladic (Hadjianastasiou 1989, 212–215). Characteristic is the presence of a fine vase by the *Reed Painter* of the LM IB period, a sample of the output of important palatial workshops of Crete, the products of which were imported to the whole of the southern Aegean as vessels of high aesthetic value, that is prestige vases (Hadjianastasiou 1989, 209–212, fig. 2, pls. 39–40; Cosmopoulos 1998, 135, fig. 9) (Fig. 7.6). The same is true for another exquisite import from Crete, a LM IB Knossian(?) vase decorated with relief shells (Fig. 7.7). The Cretan vases of this period that have an identical relief decoration are very few, and are all jugs from Poros-Katsambas, Mochlos, Zakros and Marseille (Dimopoulos 1999). A bridge-spouted jar of the same period (Fig. 7.8) shows, however, that the potters of Naxos were proficient

in the ceramic technology of Crete and imitated it credibly, while analogous influence from Crete is attested by finds from neighbouring Kato Kouphonisi (Hadjianastasiou 1989, 215, fig. 2, pl. 40d; Philaniotou 1988–89, 455, fig. 6).

‘Minoan’ conical cups are reported from Mikri Vigla (Barber and Hadjianastasiou 1989, 92, nos. 214–223, fig. 14) and are also found in the earlier horizons of Late Bronze Age Grotta (Fig. 7.9). They appear mostly in the City I phase (Cosmopoulos 2004), within the LH II–IIIA (non-stratified) horizons, but the shape continues in the City II phase, albeit in very low numbers. Despite their implication in ‘Minoanisation’ (Wiener 1984; 2013, 153–154; Sakellarakis 2013, 67–69, fig. 32, 156–162) these conical cups are not sufficient for defining the ‘Minoanisation’ of Naxos, being local pottery products.

From the LC II horizons of the Dimitrokalis plot at Grotta also come sherds of Marine Style vases dating to the LM IB period; such fine ceramics, however, were also produced in the Greek Mainland, as the analysis of samples from Melos, Kea and Athens have shown (Mountjoy and Ponting 2000).

So, while the Cretan and Helladic elements are patently clear at Grotta, the finds reflect a Cycladic, if not exclusively Naxian production that is frequently on a par with the genuine models from far away. The similarities with vases from almost the entire island area (Kea, Melos, Thera, Dodecanese) presuppose a very wide network of contacts, with Naxos playing a crucial role in the central Aegean and particularly in the Cyclades. Architectural features, such as the fragments of wall-paintings found at Mikri Vigla (Barber and Hadjianastasiou 1989), and the carefully made plaster floors, like the example of the LH IIIA1 House A at Grotta, City I (Cosmopoulos 1998, 131, figs. 3–5; 2004, 26, 29, figs. 1–2; Vlachopoulos 2009, 104–105), fill in a picture familiar from the flourishing island centres of the period (Ayia Irini: Morgan forthcoming; Phylakopi: Barber 2007; Dickinson 2007; Hood 2007; Renfrew *et al.* 2007). The conclusion drawn is that although the islands were affected by the powerful cultural spheres of the time, they preserved the independence of their insular dynamic.

Thus, during the early New Palace period, at the time when distinct Cretan elements are encountered on some of the Cyclades, which are interpreted as criteria for their ‘Minoanisation’, Naxos demonstrates an intense intra-Aegean mobility, that had been developed mostly with Thera and Crete. This multifaceted relationship with the South Aegean seems to cease after the LC II/LH II/LM IB period, that is after the destruction of the palaces on Crete. The explanation for this change should be correlated with the earlier (LC I/LM IA) disappearance of Thera from the map of the Aegean and evaluated as the subsequent aftermath of the breaking of the chain that, until that time, was uniting Naxos with Crete.

The next detectable archaeological material from Grotta dates to the early 14th c. BC (LH IIIA1), the period that is

associated with the phenomenon of ‘Mycenaeans’ of both the insular Aegean and the Asia Minor coast.

### ***Mycenaeans Naxos***

On the Greek Mainland (with the most important centres in the Argolid, Messenia and Boeotia) during this century the power of the Mycenaeans, the “Achaean kings” of Homer, was consolidated and their gradual expansion towards the Aegean commenced. The first proven Greek-speaking inhabitants of the Aegean, following the model of Crete, founded palaces, used Linear B script for keeping accounts and apparently dominated in Knossos following the LM IB destructions on Crete, combining old and new political power, and introducing cultural innovations (Macdonald 1997, 267; Stürmer 1997; *contra* to mainland populations on Crete, see Nafplioti 2007).

In the Cyclades and the Dodecanese the Mycenaean presence intensified, as a result of which in the centuries 1400–1200 BC (Late Helladic IIIA–B periods) the Aegean was a uniform sea of homogeneous civilisation and a bridge towards the East and Cyprus with its copper ores, regions that reinvigorated the mercantile activity of the period (Vlachopoulos and Georgiadis 2015). The Cyclopean fortifications of the Helladic citadels with wall-painted palaces are not encountered in the Aegean, where the settlements were attuned to the terrain particularities of each island (Vlachopoulos 1999a; 2012, 339–345, 383–387). It seems that a unitary kingship never moved to the Cyclades, where the limited potential for farming as well the independent geographical and cultural character of the islands would not have favoured the development of collective economic and cultural systems of Helladic type (Vlachopoulos 2008, 491; 2012, 398–400). For some historical reasons, however, Melos seems to have been politically dependent from some Greek Mainland authority, as the ‘megaron’ at Phylakopi implies (Schallin 1993, 177; Barber 1999, 2010; Feuer 2011, 526).

The final horizon of the Late Bronze Age is linked with the period when the palatial system of the Greek mainland had collapsed (12th–early 11th c. BC) and a large part of the mercantile and economic activity had been shifted to the islands. In archaeological terminology this period is known as Late Helladic IIIC (Vlachopoulos 2012, ch. 14 with full bibliography of the LH IIIC phase in the Aegean per geographical area). The population of the peripheral centres of the Aegean was renewed, ushering in the historical phenomenon of Greek colonisation, which was to reach its climax in the 8th c. BC. In the Aegean islands in these years, erroneously dubbed the ‘Dark Age’, there was a creative reorganisation of society and its institutions, which was to lead to the ‘city-state’, the vital cell of Hellenic civilisation (Lambrinoudakis 2001, 18–19; Vlachopoulos 2012, 349, 391–405).

Over these four centuries, 1400–1050 BC, Grotta was inhabited without interruption, evolving into a major

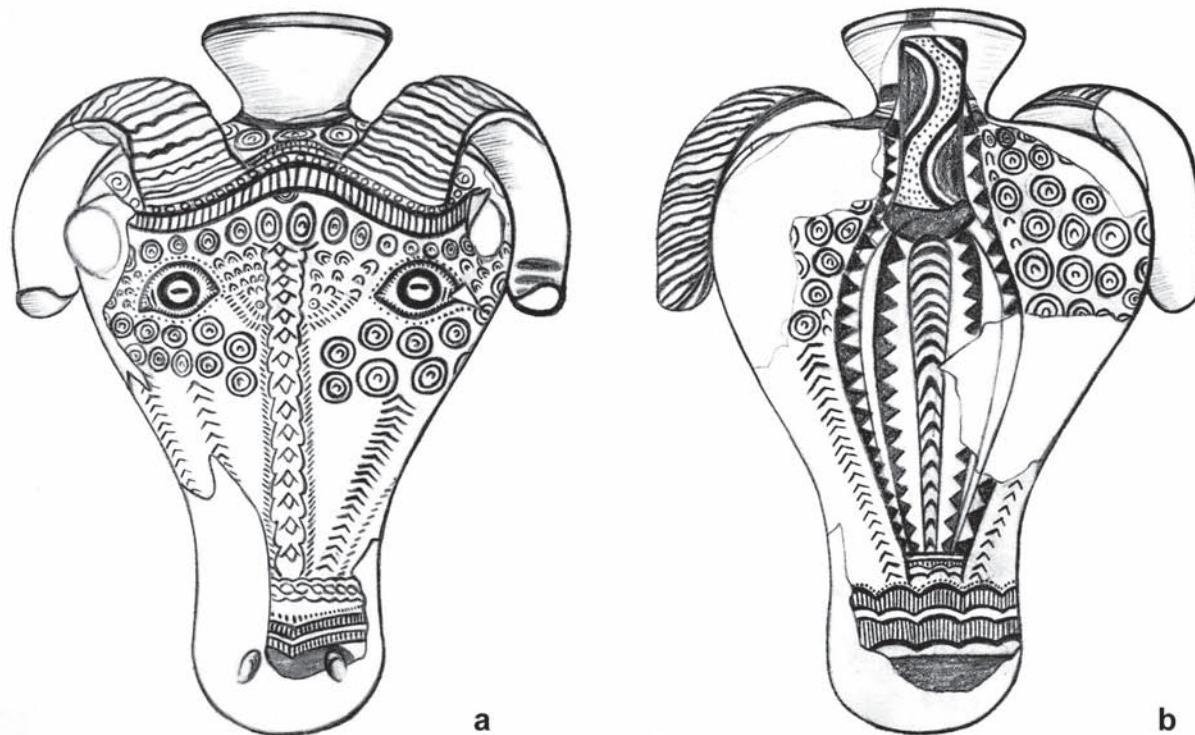


Fig. 7.10: Grotta. Clay ram's head rhyton, LH IIIA2/B1. Ht. 13 cm. Naxos Archaeological Museum. (Drawing: M. Venios. Courtesy: C. Doumas).

settlement centre on Naxos (Fig. 7.4). As a consequence of geological transformations dated to much later centuries, the northernmost part of the city was submerged and the remains of the quay and clusters of houses were found essentially in the water. On the Palatia headland, a manmade channel was created at the point connecting the two harbours of the city, offering the possibility of mooring on either side of it, which contributed to the settlement's longevity and prosperity (Lambrinoudakis and Philaniotou-Hadjianastasiou 2001; Vlachopoulos 2003a; 2003b; 2008).

With full acceptance of the definition for the Mycenaeans once given by O. T. P. K. Dickinson ("Mycenaeans are not a *people*. They are just what we call a *culture*": in Barber 1999, 139) and perceiving 'Mycenaeanisation' more as an intra-Aegean 'acculturation' rather than "ethnic or cultural identity" (Feuer 2011, 527–528), we conclude that the gradual expansion of Mycenaean material culture to Naxos was completed by around 1400 BC.

#### **Grotta: City I (LH IIIA–B)**

In LH IIIA1, the first 'Mycenaean' settlement at Grotta (City I) developed on the north shore of the Chora of Naxos, inaugurating a period of direct collaboration or functional accord of the island with the mainland, which lasts until the end of LH IIIA2 (Cosmopoulos 1998; 2004). Even if there was no need to install a dynast at Grotta or

for a military operation by the 'Mycenaeans' to capture the island, the absolute prevalence of Helladic type high-quality pottery of the period attests the full incorporation of Naxos in the 'international' milieu of the Mycenaean realm (Cosmopoulos 1997; 1998; 2004). The pottery of City I (LH IIIA1–B2) macroscopically is characteristically Helladic and more specifically Argive (Cosmopoulos 2004), but awaits further petrographic analysis. It is also imported to Naxos from several other centres of the Greek Mainland, continuing the earlier trend of the island's major settlement in receiving prestigious artefacts, such as an elegant LH IIIA2/B1 ram's head rhyton (Doumas 1968) (Fig. 7.10). This find, as well as a locally made acrolithic 'kouros' figurine (Vlachopoulos 2009), are probably associated with cultic and ritual activity in the coastal zone.

Despite its strong Helladic-Argive character, the pottery of the early Mycenaean horizon of Grotta also coexists with the declining 'Cycladic' pottery tradition, as few sherds of Red and Black Ware testify (Fig. 7.11). This bichrome pottery, unstratified and so far poorly documented on Naxos, which was for the first time revealed in the Late Bronze Age horizons of Phikalopi (Atkinson *et al.* 1904; Barber 2007), brings Melos' ceramic sequence closer to that of Naxos, pointing to a network of direct and reciprocal relationships between the two islands.

City I flourished throughout the LH IIIA period, producing interesting architecture such as the megaroid House E



Fig. 7.11: Grotta. Sherds from Grotta – City I. Naxos Archaeological Museum. (Courtesy: The Archaeological Society of Athens).

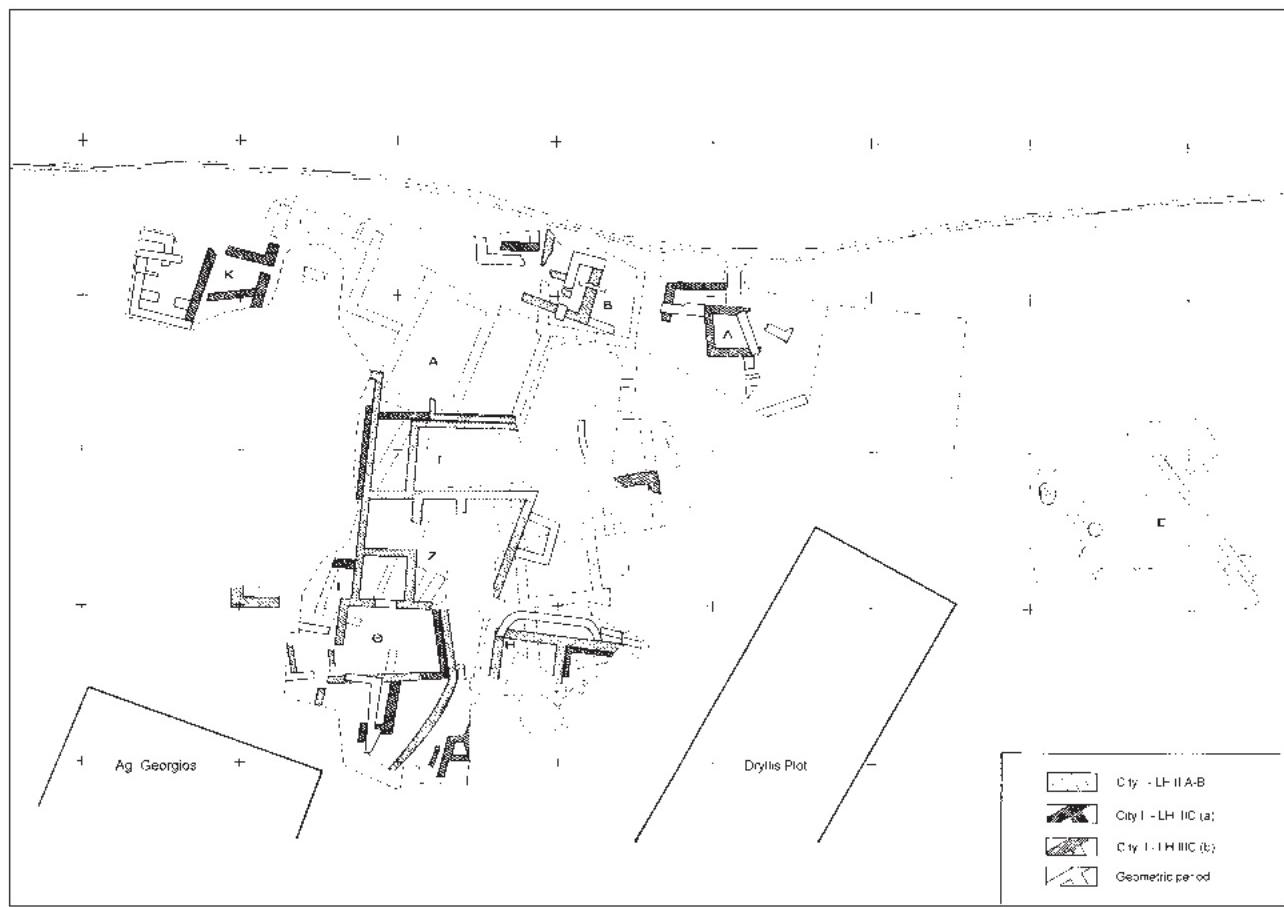


Fig. 7.12: Grotta. General plan of the Mycenaean Settlement (City I, City II) excavated during 1950–1985 by N. Kontoleon and V. Lambrinoudakis under the auspices of the Archaeological Society of Athens.

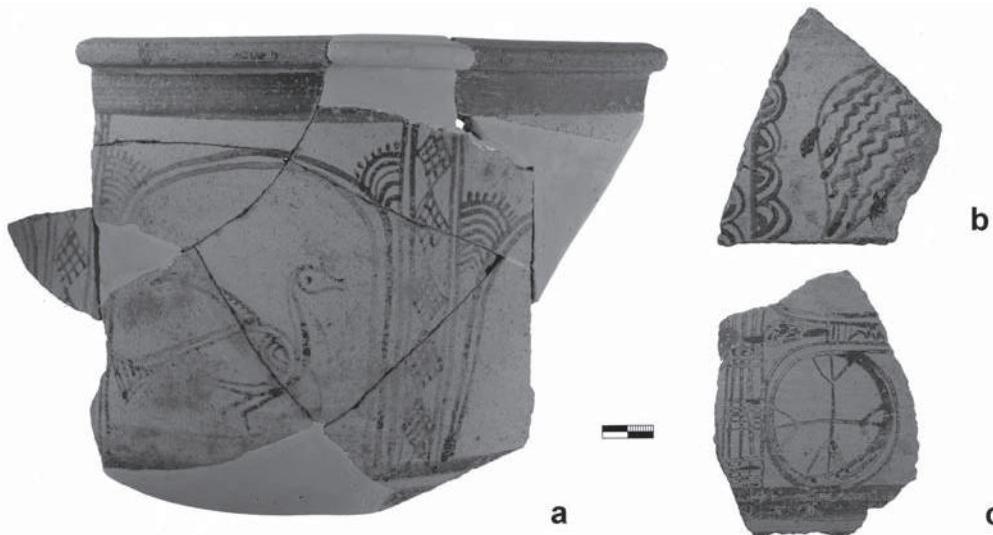


Fig. 7.13: Grotta. LH IIIC Pictorial style pottery from City II. Naxos Archaeological Museum. (Courtesy: The Archaeological Society of Athens.)

(Eirinodikeion plot), and private houses clustered in blocks around a triangular square (Cosmopoulos 1998, 131, fig. 3; 2004; Vlachopoulos 2003a; 2003b; 2009, 103–104; 2012, 346–347). In this period, Naxos appears to be linked with the Greek Mainland (as Melos clearly is), but based principally on the pottery, one cannot tell at what level, nor how different its ‘history’ is eventually from the rest of the Cyclades and the Dodecanese. The settlement at Grotta gradually declined and finally was deserted, perhaps due to an earthquake, before the end of the 13th c. BC (LH IIIB2). The inhabitants returned in the LH IIIC Early period, levelled the ruins and built a second city (Fig. 7.12), but with a different orientation (City II). This phase, strictly contemporary with the clusters of the near-by chamber tombs at Aplomata and Kamini, was named conventionally Grotta Phase (Vlachopoulos 2003b; 2012, 346, 366–372) (Fig. 7.13) and lasted for over a hundred years (Middle – Late LH IIIC period).

The change in the orientation of the town grid from City I (of about 30°) might be a result of social upheaval and population change, perhaps resulting from the nucleation of the rural population in the town. The earthquake at the end of the 13th c. BC was perhaps only an opportunity to lay out a new town, as in itself it does not explain the intentional levelling of the ruins and the construction of a new settlement with its own orientation and less elaborate architectural style.

### Grotta: City II (LH IIIC)

City II was surrounded by a thick fortification wall running north-south, consisting of a stone crepis and a mud-brick superstructure, part of which was excavated in Metropolis Square, at short distance south of the Grotta

coast (Lambrinoudakis and Philaniotou-Hadjianastasiou 2001, 160, figs. 2–3; Vlachopoulos 2003a; 2003b; 2008, 481, fig. 43.5). Its construction is of a type not known elsewhere in the Cyclades, where stone superstructures of the walls prevail, but which is encountered in Boeotian Thebes, Tiryns, Cyprus and the East (Aravantinos 1988; Lambrinoudakis and Philaniotou-Hadjianastasiou 2001; Barber 2010, 167; Vlachopoulos and Georgiadis 2015). A complex group of buildings in direct contact with the wall is associated with a potter’s kiln and other pottery and faience manufacturing installations and is one of the few well-preserved areas of workshop activity of the Mycenaean era (Vlachopoulos 1999b; Philaniotou 2003).

A looted (LH IIIA–B?) tholos tomb at Chosti, near Komiaki, a few LH IIIA–B sherds from Zas Cave, some LH IIIC finds possibly connected with open-air cultic activity underneath the geometric-archaic temple at Yria, rural installations at Karvounolakkoi and Lygaridia, and very few sherds from Eggares (Vlachopoulos 2006, 79, 83, 88, figs. 8–11; 2012, 348–349) complete the ‘Mycenaean map’ of Naxos (Fig. 7.4). The absence of systematic settlement in the countryside and the flourishing of the fortified settlement at Grotta indicate that a large part of the island’s population must have been organized after the model of the *asty* and that historical circumstances on Naxos possibly favoured a ‘synoecism’ of analogous form to that which took place in the Argolid, Rhodes, Attica and possibly elsewhere (Volos, Palia–Iolkos) in the same period (Vlachopoulos 2012, 393–394).

The cemeteries of this period – two clusters of chamber tombs at Aplomata and Kamini – preserved a large number of finds, pottery and the minor arts, yielding homogeneous LH IIIC Middle and Late material (in terms of ceramic and

vase-painting production, types of weapons and tools, styles in jewellery etc) that is still unique in the Cyclades (Kardara 1977; Vlachopoulos 2006, 2012). The development of two cemeteries on hills at a considerable distance from each other shows that perhaps these corresponded to particular groups of contemporary clans. The presence of important prestige goods in the tombs (Fig. 7.14), in combination with the finds from the synchronous settlement at Grotta, documents the high standard of living on Naxos in the 12th and the early 11th c. BC, and advocates the existence of a powerful local elite that was presumably active in the governance of the island and the management of its economy (Vlachopoulos 2006, 337–348; 2012, 400–405). This local elite class could guarantee the political and social coherence, and control the means of prosperity, as the smooth development of the settlement's phases and the continuous use of the two cemeteries testify. Of special importance is the fact that strontium analysis of the surviving skeletal material by A. Nafplioti pointed out that these elite clans of the 12th c. BC were of Naxian origin (Nafplioti 2007; forthcoming).

The ‘sword-bearing’ and ‘horse-breeding’ members of this distinguished Naxian class are connected with the so-called ‘warrior burials’, male inhumations accompanied by *kterismata* that testify the deceased’s connection with warfare and secondarily with hunting; bronze weapons (two Naue II swords and two spear heads among them) could be viewed either as martial accessories or as symbols of prestige and insignia of office (Deger-Jalkotzy 2006; Vlachopoulos 2006, 98–99; 2012, 60–66, 259–263, 393–394, 400–402, 404–405). This ‘heroic’ image of Naxian society is reinforced by a Pictorial-style mug from Palatia, with representation of a duel between men holding spears, which remains unique in the iconography of the period (Fig. 7.15).

The Pictorial Style of Naxos, the best examples of which are the strainer jugs “of the dancers” and “of the fishermen” (Fig. 7.16), and the Grotta krater of monumental dimensions, is in line – in thematic repertoire and style – mainly with the pottery styles of mainland Greece, following the then current trend for vase-painting in the narrative vein, with scenes of social activities or customary performances of collective character (Vlachopoulos 2006, 189–196, fig. 39; 2012, 162–165; forthcoming). The Naxian pottery workshop of pictorial vases testifies to a high level of ceramic technology; as far as its iconography is concerned, it reflects the interests and the ideas of the local population for social/communal activities related to sports, athletic races and burial customs (Hadjianastasiou 1996; Vlachopoulos 1999b; 2012, 170–171).

The placing of old sealstones in the graves was a common phenomenon during the Late Mycenaean period, also occurring in Naxos (Vlachopoulos 2012, ch. 12). A very important seal and one of the most outstanding in

terms of iconography of the 14th c. BC (LH IIIA period), is the so-called “prince’s seal”, found in a tomb of the 12th c. BC, on which is represented a male figure holding a spear and venerating before a palm tree (Pini 1975, V2, 483, no. 608; Vlachopoulos 2006, 305–309, pl. 115, col. pl. 15; 2012, 276–278). However, the Aplopata sealstone of hegemonic iconography clearly continued to enhance the prestige and acknowledged power of the descendants of the old aristocratic clans (Vlachopoulos 2012, 271–272), as some few artefacts from the same chamber tombs also reveal (Vlachopoulos 2006, 309–313, 319, 329–330, pl. 115, col. pls. 12, 14).

Both the cemeteries and the City II settlement (especially the stratified horizons of the Metropolis Square excavation) testify to considerable wealth with goods imported from Cyprus and ever further (Philaniotou 2003; 2006, 277, fig. 404; Vlachopoulos 2012, 295, 298). The majority of pottery from City II comes from Naxos, with some obvious imports from Crete, the Dodecanese, the northwest and southwest Peloponnese and Attica. The geographic distribution of the densely decorated LH/LM IIIC stirrup jars imported from Knossos, Kos, Rhodes, Argolid, Laconia and Perati, places Naxos properly in the core of this “Post-palatial Aegean geography” displaying the island’s nuclear role in the dense network of the sea-faring transactions of the 12th c. BC. The lack of evidence for exports from Naxos at this time contrasts with the bulk exports of the earlier periods, but the trade imbalance of the 12th c. BC further documents the economic power of the island, rather than indicating inactivity or passivity.

The city at Grotta was abandoned in the mid-11th c. BC (late LH IIIC period). Life continued normally, the people simply moved their homes from the Mycenaean city, which, since the Early Protogeometric period, was gradually turned into a random burial ground at first and then into an organized cemetery with orderly tomb enclosures (Vlachopoulos 2012, 348–349, 401). A large earth tumulus covered the Geometric cemetery of the Metropolis Square, converting this public *sema* into a place for the commemoration of ancestors. (Lambrinoudakis 1988).

## Naxos and the Mycenaean World in LH IIIC

The Mycenaean World of the 12th c. BC is often viewed as a widespread ‘koine’ (Desborough 1964; cf. Vlachopoulos 2012, 382). Indeed, some scholars go so far as to see the cemeteries of Kos and Rhodes as belonging to the eastern branch of the community that lived in Naxos and Attica (Desborough 1964, 227–228; cf. Darcque 2008, 366; Thomatos 2006, 257–259). But the Mycenaean Aegean is by no means as homogeneous as a ‘koine’ would wish to see it, and historically the circumstances of ‘Mycenaeans’ of each island were linked with

strong local phenomena (Vlachopoulos 2012, 382–387; Vlachopoulos and Georgiadis 2015).

Without knowing the political facts (polities and leaders, alliances, means of exercising power) we cannot approach the political conditions of the Mycenaean period in the Aegean islands. As has been demonstrated in detail, however, the qualities of each island reflect its unique character through time moving toward the historical era (Vlachopoulos 2012, 382–387, 395–398).

The differences observed in the topography of the sites (rocky citadels, hills, coastal locations or inland) and the material remains (fortification walls, types of buildings, cemeteries, etc.), as well as the lack of pottery synchronisms between the most important centres (Ayia Irini on Kea, Koukounaries on Paros, Agios Andreas and Tis Baronas to Froudi on Siphnos, Phylakopi on Melos, Ellinika on Kimolos, Katapola on Amorgos and Monolithos on Thera, to name a few), show that each island in the Cyclades followed its own fate, which was dictated by the local historical circumstances, and that each experienced its own cycle of heyday during the long Post-palatial period (Vlachopoulos 1999a; 2008; 2012, 396–398, 400; see *contra* Barber 1999, 137).

Nevertheless, mercantile activity during this period was intensive and continual. After the breakup of the palatial system on the mainland, the Aegean Sea routes became bilateral and ‘anti-monopolist’, accepting of new contacts (Vlachopoulos 2006, ch. 7; 2012, ch. 13; Vlachopoulos and Georgiadis 2015).

In terms of quantity and quality, the increased amounts of exports were from Crete, the Argolid and Attica, particularly of pottery and possibly of packed liquid goods (Vlachopoulos 2012, 281–285, 355–357 [Crete], 286–287, 312 [Argolid], 289–291, 329 [Attica]). The extensive trading of Minoan fine and domestic stirrup jars points to the leading role of Crete (namely Knossos and Eastern Crete) in the economic and cultural activity of the 12th c. BC, a role which, so it seems, it never lost and which was not due to temporary trading recovery (Vlachopoulos 2012, 281–282, 352–357). However, this in no way constitutes a second ‘Minoanisation’ of the Aegean – this, at least, has not yet been proposed in the bibliography.

The conditions of prosperity and of systematic trading contacts between one dense network of island, coastal and mainland centres of post-palatial Greece were boosted further by the representations on Pictorial-style vases (Vlachopoulos 2012, 159–162, 378–382). The proliferation of the depictions of ships after the fall of the Mycenaean palaces confirms not only the unimpeded conduct of maritime trade, but also, primarily, the high level of shipbuilding during the 12th c. BC (Vlachopoulos 2012, 165–170, figs. 12–19). The representations of sea-battles on large craters from Kynos (Dakoronia 2006), Kos and Bademgediği Tepe (Mountjoy 1997) also speak of tension and (civil?) warfare

in the 12th c. BC, as do the Warrior Krater from Mycenae and similar vases from other places, including Naxos; this iconography, however, is of triumphant narrative, as if these thriving peripheral centres need to advocate their “heroic labours”. From this point of view such pictorial cycles are heralding the heroic-mythic episodes that Greek ‘epos’ will very shortly encapsulate (Deger-Jalkotzy 1998, 125; Vlachopoulos 2012, 393–394).

Recent discussion about the LH IIIC period (Deger-Jalkotzy 1998; Georgiadis 2003; Thomatos 2006; Vlachopoulos 2006; 2012, Vlachopoulos and Georgiadis 2015) demonstrates that the 12th and the early 11th centuries BC reflect the cultural uniformity of independent communities that shared the same lifestyle, in its basic characteristics, in the period when the fall of the palaces had weakened social and economic structures, thus enhancing the physiognomy, the character and the possibilities of the smaller peripheral sites. This is the period in which the geographical boundaries and the profile of the ‘centre’ are blurred or differentiated and the concept of the ‘periphery’ correspondingly changes character and content (Vlachopoulos 2012, 306, 382–391, 393–394).

Thus, when the LH IIIC period expires on Naxos it is not clear whether the significant element of its material culture should still be called ‘Mycenaean’ or whether the historical phenomena in the realigned post-palatial Aegean, and especially in the multifarious Cyclades, make this convention misleading (Vlachopoulos 2012, 398–400). What is clear is that the end of the second millennium BC finds Naxos thriving, with its community far more ‘Naxian’ than anything else.

## Conclusions

The foregoing synoptic exposition of the data for the Middle and Late Bronze Age of Naxos was made mainly from a wider Aegean perspective and through interpretation of the finds from the island. The question whether modern research can include Naxos during the second millennium BC in the spheres of influence of the major centres of Crete and the Greek Mainland, and can consider the island ‘Creto-Mycenaean’, is rhetorical and dicey. The question functions as a pretext for a debate that we would like to lead to the clearest possible evaluation of the archaeological data and not to the facile subjection of these to the modes of the bibliography. When we discuss the ‘Minoanisation’ and the ‘Mycenaeansation’ of Naxos we should put as *a priori* terms of the discussion its non-‘de-Naxianisation’.

In previous publications on the Naxos cemeteries, I have commented that “Grotta, the major settlement of Naxos, with the adjoining chamber tomb clusters of Aplosmata and Kamini...is the best-known example of the ‘Mycenaean city-state model’ of the LH IIIC period in



Fig. 7.14: Kamini cemetery. One of the four identical gold sheet plaques with a representation of a child found in the burial pit of a child. LH IIIC Middle. Naxos Archaeological Museum. (Courtesy: The Archaeological Society of Athens).

the Aegean” (Vlachopoulos 2012, 405; Vlachopoulos and Georgiadis 2015). Magnifying the chronological spectrum of our focus on Naxos and seeking its identity during the second millennium BC, I may rephrase this assumption as follows: if we need a ‘model’ in which the physiognomy of Middle and Late Bronze Age Naxos is better ascribed, this could be the “island-state” model, a self-sufficient insular polity diachronically equidistant from Minoan Crete and the Greek Mainland in terms of political-administrative autochthony, cultural originality, trade activity and other economic interests. A prosperous Cycladic island ‘neither far from Knossos nor close to Mycenae’ is not meant, however, as an *insula* which mainly transacts with the islands of its vicinity, disconnected from the social and political environment of the larger territories surrounding it. On the contrary, the mainland-insular character of Naxos (assimilating in scale the landscape and productive potentials of Crete and of the Peloponnese), along with the distinct geopolitical and mercantile advantages of the Cyclades, forged a special relationship of ‘remote vicinity’ with the palatial estates of the second millennium BC, that favoured its singularity.

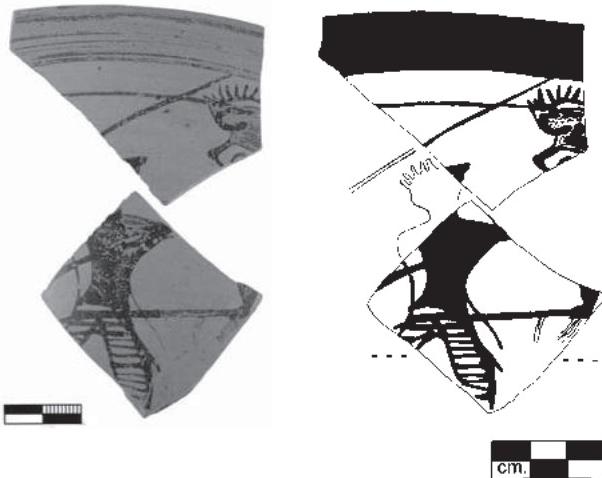


Fig. 7.15: Grotta. LH IIIC Middle Pictorial-style mug depicting a duel between male figures. Naxos Archaeological Museum. Drawing: N. Sepetzoglou. (Courtesy: The Archaeological Society of Athens).

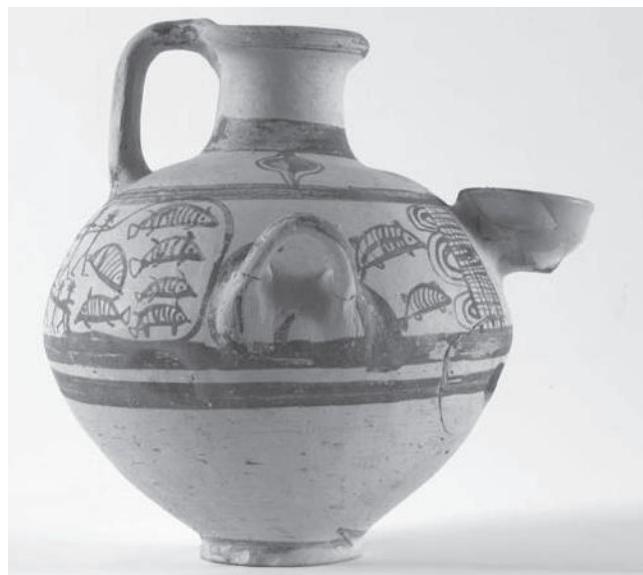


Fig. 7.16: Aplomata, chamber tomb A. The strainer jug “of the fishermen”. LH IIIC Middle. Naxos Archaeological Museum. (Courtesy: O. Philaniotou).

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# KEIAN, KEI-NOANISED, KEI-CENAEANISED? INTERREGIONAL CONTACT AND IDENTITY IN AYIA IRINI, KEA

*Evi Gorogianni*

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## Introduction

Ayia Irini is one of the sites that has played a pivotal role in the discussion of the phenomena of material culture change during the MBA and LBA, phenomena often called *Minoanisation* and *Mycenaeanisation*. These phenomena had been discussed sporadically (Atkinson *et al.* 1904; Mackenzie 1904; Evans 1928, 229–252; Starr 1954; Buck 1962) prior to the exploration of the site by John L. Caskey of the University of Cincinnati from 1960 to 1976.<sup>1</sup> His excavations revealed a small (in terms of acreage) but long-lived site strategically located in a sheltered harbour and beside a freshwater spring that first attracted human activity during the Final Neolithic and with some interruptions endured as a settlement until the end of LH IIIA. The site seemed to be well connected, indicated by imports streaming in during every period of its history. Nevertheless, during the MBA and LBA periods, locally produced material culture seems to change, following trends current in the contemporary palatial communities on Crete and also in other island and coastal communities of the Aegean, even though it never lost its strong connection to the Mainland (Barber 1987, 161). Thus, right from the beginning of archaeological investigation, Ayia Irini's engagement with the 'outside world' and cultural change were central to the research agenda.

As early as 1967, scholars (Warren 1967; Caskey 1969; Hood 1971, 52, 118; Davis 1979; 1980; 1986; Cherry and Davis 1982; Schofield 1982; Wiener 1984; 1990) began speculating on the status of the site, its relationship to the political systems in Minoan Crete and Mycenaean Greece, and the mechanisms behind cultural change.<sup>2</sup> These processes and mechanisms were usually discussed as one overarching phenomenon, in terms that approximated anthropological definitions of unidirectional acculturation, a process through which one group (usually politically and

perhaps culturally 'inferior') adopts the beliefs, practices and/or material culture predilections of the 'dominant' group, which is thought to have assumed political and/or economic control (albeit the degree and the physicality of this control is debatable). For Aegean sites in general, some scholars argued for acculturation through the presence of colonies and actual Minoan or Mycenaean immigrants (*e.g.*, Mackenzie 1904, 270–272; Furumark 1950, 200, 264; Scholes 1956, 38, 40; Immerwahr 1960; Branigan 1981, 1984; Wiener 1984; 1991; 2013; French 1986; Barber 1987, 51, 53, 194–200; see also Schofield 1983; 1984), while others rejected or avoided the subject with more benign but no less pervasive views of the cultural process that emphasised the active role of Aegean communities in adopting cultural traits and practices (Davis 1979; 1980; 1984a; Davis *et al.* 1983; Davis and Cherry 1984; Marthari 1990; more recently Knappett and Nikolakopoulou 2008).

Not unlike previous narratives about similar sites in the Aegean (Furumark 1950), the key element in these formulations was the introduction of foreign elements (artefacts or practices) into the cultural repertoire of one period, which altered the local idiom. Such perspectives were based on a binary perception of categories (such as local and foreign, and purity and hybridity) and cultural historical theoretical underpinnings that defined cultural entities based on the geographical and chronological spread of traits, which were considered markers of the spread of a particular cultural group (Jones 1997, 16–26; Lucy 2005, 87–91). Recently, a number of scholars have problematised these relationships (Sherratt 1999; Broodbank 2004; Davis and Gorogianni 2008; Knappett and Nikolakopoulou 2008; Panagiotopoulos 2012) following a growing number of voices in the wider discipline of archaeology that such binary categorisation is too simplistic (see Lucy 2005).

Despite the pivotal role of the site for the discussion of Minoanisation and Mycenaeanisation, it has been decades since these phenomena were discussed with Ayia Irini as the focus.<sup>3</sup> A reappraisal of the phenomena of cultural contact in the form of Minoanisation and Mycenaeanisation for Ayia Irini is therefore long overdue. This paper utilizes the major research efforts undertaken during the last decade at the site, particularly the completion of the Ayia Irini Northern Sector Archaeological Project (AINSAP) co-directed by R. D. Fitzsimons and the author, as well as the work by John Overbeck, Donna Crego, and Natalie Abell.

This paper approaches the topic of cultural change by examining locally produced pottery from Ayia Irini and comparing it, albeit briefly, to data from other artefactual categories, such as implements used in textile production, architecture, and wall-painting. The author also highlights the diachronic perspective and tracks the timing of these processes of change and emulation, as the timing and duration of the phenomena hold nuances that should definitely feature in any explanation of them. Minoanisation in the Aegean is considered to have started (with notable exceptions) in the MBA, peaked in LC I, and tapered off in LC II (Broodbank 2004, 49), a time span which, at least for the ‘early adopters’ (Rogers 1962, 283) such as Phylakopi, Akrotiri and Ayia Irini, amounts to a couple of centuries. During such a protracted period of time, it is highly unlikely that the same conditions or attitudes are represented (especially if Minoanisation was a directed process either by the Minoan palatial centres or by Aegean elites). The same applies to Mycenaeanisation, which began in LC II as Minoanisation declined, although the process may be suspected to have begun long before as the mainland Greek palatial polities and their associated elites dynamically entered the Aegean network as trading partners probably via proxies or independent entrepreneurs. The purpose of a diachronic perspective is to find differential rates or qualities in the process of cultural interaction between different parties and Ayia Irini, which will provide a better idea about how the processes worked.

This paper assumes that Aegean communities in different regions have been interconnected to different degrees or intensity. This contact was probably not between different ‘cultural groups’ with connotations of biological and ethnic distinctions, as is sometimes assumed by the use of the Helladic, Cycladic, and Minoan designations that ultimately characterise material culture groupings (for a summary of the intricacies in identifying ethnic groups in material culture groupings, see Lucy 2005, 91–94). Rather, it was among groups of people that probably shared a general ideology but who identified themselves as belonging to different modalities by doing things in similar but distinct ways (*e.g.*, Dietler and Herbich 1998). It was in the context of these contacts that communities in the Southern Aegean, from the

western coast of Asia Minor to the coast of the Peloponnese, and from a notional northern boundary set between Keos and the Izmir region to Kythera and Karpathos (Broodbank 2004, 48; Davis and Gorogianni 2008, 343–345), seem to adopt non-local traits and emulate artefact styles and practices that were prevalent in communities on the island of Crete (Minoanisation) and, later, in palatial communities of the Greek Mainland (Mycenaeanisation). Even though physical forms of control or dominance cannot be wholly excluded as part of these processes, evidence is not adequate (nor, certainly, incontrovertible) to suppose that communities such as Ayia Irini were controlled in one way or another by the Cretan or Mainland palaces, nor that everything about the phenomena was elite driven. In fact, this paper accepts that these phenomena are quite complex, and that archaeological signatures on the ground cannot be satisfactorily explained by single explanations, such as a physical colonial presence, the Versailles effect, colonialism or even indigenous elite emulation (Branigan 1981; 1984; Wiener 1984; 1991; 2013; Barber 1987, 194–200; Knappett and Nikolakopoulou 2008). Rather, the archaeological record seems to have been the product of a number of processes and actions; a deconstruction of the phenomenon into separate contributing processes is therefore in order. This paper attempts explore that deconstruction for Ayia Irini in order to begin moving away from treating the cultural processes as monolithic, and to start not only acknowledging the macro-level processes that were surely in operation but also discerning the aspects of the identities and motivations of the agents (both individual and group) responsible for affecting change in the local cultural idiom.

In this paper, after a discussion that establishes the general timeline as well as a profile (demographic and other) for the settlement of Ayia Irini, a diachronic examination of pottery shapes produced by local potters acts as a point of departure for a discussion of changes ushered in by cultural contact. The focus on shapes is justified since dining practices, eating and cooking habits are often considered good indicators of cultural change, changing socio-political environments, and migration (Branigan 1984, 50; Schofield 1983; 1984; Dietler and Herbich 1998; Hamilakis 1999; 2008; Broodbank 2004, 59–60; Joyner 2007; Ben-Shlomo *et al.* 2008; Karageorghis and Kouka 2011). The discussion of the pottery is then supplemented and at times contrasted to changes in other media, such as architecture and textile production. The overall discussion is influenced by discussions of materiality (Miller 1987; 2005; 2010; Maran and Stockhammer 2012), the power of objects in the context of intercultural contact (Gosden 2004; Knappett and Nikolakopoulou 2008; Knappett 2011; van Pelt 2013), and theories of small-scale migration (Anthony 1990; 1992; Burmeister 2000).

*Table 8.1 Chronological concordances in the Aegean. Absolute dates after Manning (2010, 23, tab. 2.2). Even though length of a generation is variable depending on the average age of parents at time of reproduction, for the purposes of this chart generational length is 20 years.*

Aegean	Relative chronology	Approximate absolute dates BC	Ayia Irini Period	Generations
Final Neolithic	FN	3500–3000	I	
Early Bronze Age	EB I	3000–2650	Hiatus	
	EB II	2650–2200	II	
	EB III	2200–2000	III	
Middle Bronze Age	MB I	2000–1900	Hiatus	
	MB II	1900–1800	IV	5
	MB III	1800–1700	V	5
Late Bronze Age	LB I	1700–1600	VI	5
	LB II	1600–1400	VII	12
	LB III/LH IIIA	1400–1300	VIII	3
	LB III/LH IIIB	1300–1200		
	LB III/LH IIIC	1200–1100		

### Ayia Irini Definitions: Establishing the Timeline and Parties Involved in Episodes of Cultural Contact

Before delving into the specifics of the local ceramic assemblage, it is useful to provide context for the site, not only in terms of its habitational history but also in terms of its scale, character, and internal social structure. The latter is particularly germane for understanding the interaction between polities and/or agents (both formal and informal) originating from the Aegean communities as well as from the palatial sites of Crete and the Mainland. Since there is a fair amount of literature that expounds on the latter external parties to these interactions, this section aims to clarify the profile of the parties (two or more) within the Ayia Irini community who were involved in this contact.

Caskey's excavations revealed a long habitational history at Ayia Irini (Table 8.1) with the first signs of human presence dating to the very end of the Neolithic period or the beginning of the EBA (Period I). Non-seasonal habitation probably started in EB II (Wilson 1999, 1; 2013) and after a very prosperous period (Periods II–III), unlike Phylakopi and perhaps Akrotiri, Ayia Irini seems to have been abandoned during the EC III and the beginning of the MBA. It was then re-inhabited during the MH II/ MM IB–II (Period IV) (Overbeck 1984b, 109; 1989b, 1; Wilson 1999; 2013), enjoying immediate prosperity. The site continued to prosper during the remainder of the MBA and the beginning phase of the LBA (Davis 1979; 1986; Cummer and Schofield 1984; Schofield 1998; 2011), a period that has traditionally been connected to the phenomenon of Minoanisation (Periods V and VI). The site then suffered a massive destruction during LB II (LH IIA–B/LM IB) (Caskey 1972, 393–397, 1979, 412; Cummer and Schofield 1984, 45–46; Schofield 1984; 1985). The generation that immediately rebuilt or reoccupied

the edifices (LH IIB in ceramic terms; for LH IIB late, see Schofield 1984, 155; Hershenson 1998) did not seem to be economically prosperous, especially in comparison with the previous phase (Caskey 1962, 273), while the distribution of deposits belonging to this period may indicate that the settlement shrank in size (Hershenson 1998, 162; Gorogianni 2008, 131–132). Nevertheless, a moderate revival seems to have occurred during LH IIIA (Period VIII); the site grew (although it never regained its pre-LB II destruction prosperity) and it seems to have been connected with the outside world (Gorogianni and Abell forthcoming). Moreover, during this phase the material culture provides evidence for a reorientation of the site's cultural references from Crete to the Mainland (Caskey 1972, 397–398; Morris and Jones 1998). The end of Period VIII is marked by yet another destruction, which also brought the end of the site as a place of habitation, even though it continued until the early Hellenistic period as a site for ritual (Caskey 1964, 323; Butt 1977; Caskey 2009).

The character of the site seems to be peculiar in a number of ways. Unlike the other Minoanised sites in the Cyclades (*e.g.*, Akrotiri and Phylakopi), Ayia Irini was re-established anew in MM/MC II, an event that entailed colonists from other parts of the Aegean coming to the island with the express purpose of establishing a community that would exploit the perceived advantages of a well-protected harbour, its geographical location along major maritime routes, and a short distance from the Lavrion mines that enabled participation in the increasing demand for metals by the state-level societies of Crete and presumably Aegina (Overbeck 1982; Overbeck and Crego 2008; Crego 2010; Abell 2014b).<sup>4</sup> The intentional character of this colonizing expedition is underscored by a recent discovery of another, probably contemporaneous, site in the eastern part of the

island, found beneath the theatre of the Classical/Hellenistic city of Karthaia (Panagou 2012).<sup>5</sup> The discovery of a second site on the island, contemporaneous to and with a similar (but not identical) range of imports as Ayia Irini (which does not seem to have survived into the later MBA), should probably be interpreted as the result of a diffuse, yet intense, interest in establishing outposts on the island.

Thus it seems that Ayia Irini began anew in Period IV as a village-sized community no bigger than its EBA predecessor. The resident population in the Period IV community probably counted no more than 150–200 people, which was also the size of the early Cycladic centre (Davis 1984b, 20, n. 17; Broodbank 2000, 218, n.2). The MBA population grew over time and the fortification wall was expanded in Period V to include an area that was one third larger than the fortifications of the previous period (Davis 1986, 102), a project that was likely spurred on by a rise in population growth, both as a result of normal population rates and also perhaps from a migration stream (or perhaps trickle) most likely originating from the places where the original migrants had come from (Anthony 1990; 1992).

In its present state, the site (within the confines of the Period V wall, including its unexcavated areas) is approximately one hectare (0.75 hectare according to Renfrew 1972, 237, table 14 V; see also Davis 1984b, 20, n.17; Cherry *et al.* 1991, 219), which makes Ayia Irini the smallest of the Neopalatial Minoan or Minoanised ‘urban’ sites (Whitelaw 2001, 29, fig. 2.10; 2004; see also Wiener 1990, 129). Even if we allow for a larger site-size based on the estimate that 40% of it is underwater (Caskey 1978, 760; Davis 1984b, 20, n.17; Mourtzas and Kolaiti 1998, 680–681; Gorogianni 2008, 117–118), Ayia Irini still would not exceed 1.2 hectares; it would be a very small harbour site, about half the size of Phylakopi (Schofield 1998, 119; Broodbank 2004, 71).

During the following Periods VI and VII, which are considered the main phases of the site, the population was confined within the boundaries of the fortification wall since surface surveys have revealed a nucleated settlement pattern for the MBA and LBA periods, similar to Melos, with very few loci of probably seasonal occupation beyond the confines of the wall (Davis and Cherry 1990, 187–188; Cherry *et al.* 1991, 229–230). The population which gradually filled the enclosed area with buildings probably numbered approximately 280–335 residents, or the equivalent of 30 to 60 families or residential groups.<sup>6</sup> Therefore, even when the site attained its largest population in early LBA, it never became large enough to inhibit face-to-face interaction among its residents.<sup>7</sup>

Despite its compact size, Ayia Irini is considered an urban site. As Schofield emphasized, it was ‘no village’ (Schofield 1998, 119–120) since it was the only known site of considerable size on the island during its main period of occupation (Cherry *et al.* 1991, 219) and it displays

functional diversity and involvement in regional and interregional networks coupled with evidence for carefully planned quarters (especially the south-eastern and western sectors), paved streets, and a drainage system (Schofield 1998, 119–120). Moreover, Ayia Irini exhibited features expected in much larger Minoan urban communities, such as Minoan imports, Minoanised local vessels, and Minoan-inspired wall-paintings, architectural features, technologies (weaving, pottery making, writing, and mensuration), and cultural practices (religion, cooking, and dining).

Thus, Ayia Irini’s situation presents an apparent paradox. It is a community that hardly qualifies as a town (let alone a city) in terms of its population size, yet it preserves all the trappings of much larger urban communities. Moreover, its size enforced face to face interaction, so the internal social structure may have been non-hierarchical (although ranking is most definitely evident) with access to decision-making perhaps being open to a large proportion of its residents and leadership decided on an *ad hoc* basis (at least prior to Period VII when House A seems to dominate the architectural and perhaps political landscape of the town), though the community never lacked traces of inequality (Gorogianni and Fitzsimons forthcoming). The most likely interpretation for the makeup of Ayia Irini is that it was a haven filled with independent entrepreneurs or middlemen (Cherry and Davis 1982; Schofield 1982; Knapp and Cherry 1994, 142–146), who were either actively involved in trading or acted as middlemen and organised transhipment (and possibly extraction) of the mineral resources as well as other products in demand by Aegean elites. Agents from the site would have come into contact with agents, formal or informal, from the palatial communities of Crete and later those from the Mainland, as well as agents originating from other nodes of the Aegean exchange network. These activities and the connections, life-histories, and aspirations of these agents and their families (Helms 1988), as well as the overarching historical circumstances, are expressed in the material culture of Ayia Irini as people outfitted themselves and their abodes, albeit to different degrees, with all the latest fashions prevalent in the Aegean at a time.

## Ceramic Shape Repertoires and Technologies and Consumption Practices

Pottery is prominent in the discussion of Minoanisation and Mycenaeanisation. Archaeologists often consider pottery an ideal barometer of cultural change and contact (Rice 1987, 25) because of its ephemerality (breakage and required replacement) and durability in the archaeological record. Indeed, the first discussions about Aegean interconnections beginning at the end of the nineteenth century centred on remarks about pottery (Dumont and Chaplain 1888, 39–40; Fouqué 1998, 127–128). This focus continued

more intensely after the excavations of Phylakopi (Edgar 1904; Mackenzie 1904, 264, 271–272) and Knossos (Evans 1928, 229–252). Key to this discussion was the change in the decorative motifs and shapes from a local selection to one that imitated motifs and shapes present in the Cretan repertoire, and also the pace of this change, as exemplified in Furumark's mid-century publication. According to his interpretation, cultural change was massive and rapid during LB I, suggesting a Minoan takeover, at least of Melos (Furumark 1950, 192–200). In the subsequent period, LB II, he suggested that Minoan and Mycenaean pottery might be present in equal quantities in Phylakopi (Furumark 1950, 198–199), signalled that during this period the Aegean trade balance started shifting towards the Mycenaeans.

More recent publications on pottery have disputed the main claims of these earlier works. For pottery from Phylakopi in particular, Davis and Cherry demonstrated that the Cretan-inspired shapes and decorative motifs were integrated gradually into the ceramic repertoire of the site (Davis and Cherry 1984; 1990; 2007), while Berg showed that Cretan influence over the technology of production was gradual, since she demonstrated that the Cretan technology of the potter's wheel was adopted slowly and gradually, more closely approximating a generational apprenticeship model (Berg 2007a; 2007b, 82–86, 138–140; see also Earle, this volume). Similar conclusions were reached about other sites, such as Akrotiri (Knappett and Nikolakopoulou 2005; 2008) and Miletus (Raymond *et al.*, this volume), among others, necessitating more sophisticated explanatory models both for the adoption of the technologies of pottery manufacture and for the emulation of decorative motifs and shapes.

Understanding of the ceramic change attributable to Mycenaeanisation has also shifted; Mountjoy and Ponting showed that the Mycenaean imports from greater Athens ('Athens super-group') were present in substantial quantities already during the LH II period at both Phylakopi and Ayia Irini (Mountjoy and Ponting 2000, 172–173), suggesting that perhaps the processes of Minoan import substitution on behalf of Mycenaean production centres had already started in the previous period, which had generally been hailed as the apex of Minoanisation.

Publications of the pottery from Ayia Irini have shown that the emulation of Cretan prototypes started in a limited fashion in Period IV (Abell 2014a, nos. 651–653, 668; 2014b), was more decisive in Period V (Davis 1986, 1, 85), and continued into the following periods until the site started changing its focus of imports from Crete to the Mainland sometime during Period VII, if not earlier (see Mountjoy and Ponting 2000, 173). The pace of the introduction of new elements into the local ceramic repertoire cannot be ascertained because the stratigraphic sequence produced by the archaeological practices used at the time of excavation does not allow finer chronological distinctions; nevertheless,

it is possible to exploit more fully the incredible store of information provided by the excavated deposits than has been done to date.

The data from the Ayia Irini deposits, however, cannot be used in the same ways as data from excavations of the modern era. The site, like many other excavations of the same time and earlier, was excavated with specific methodologies and archaeological practices (Gorogianni 2008, 88–115; 2013) that have impacted the ceramic material available for study. Since the primary goal in the original research agenda of Ayia Irini was the refinement of the stratigraphy (*i.e.*, ceramic sequence) in the Cyclades, the ceramic assemblage was processed with this primary goal in mind, and with procedures that prioritised the recording and preservation of only the chronologically informative parts of the assemblage; perceived provenance was a secondary interest. Therefore, locally produced, undecorated ceramics and coarse wares were greatly impacted by these procedures, as shown in Table 8.2, which summarises the information on discarded materials (Gorogianni in progress). However, a fair number of locally produced ceramics preserving features pertaining to shape and decoration were retained, especially if the features unambiguously identify the shape of the vessel, and hence carried the potential for chronological or typological development.

The discussion that follows focuses mostly on locally produced pottery from Ayia Irini from the Northern Sector (unless otherwise stated), since imported pottery has been summarily treated elsewhere (Gorogianni and Abell forthcoming). This focus seeks also to undo an injustice, since far less attention has been paid to the locally produced assemblage, with a few notable exceptions such as the vessels of special use (Georgiou 1986) and the conical cups, the overwhelming majority of which were produced locally (Davis and Lewis 1985; Wiener 1984; Berg 2004; Hilditch 2014; Knappett and Hilditch 2015). This relative lack of interest has been partly attributed to the unattractive appearance of the local raw materials, a red brown clay matrix with chloritic schist inclusions (Davis and Williams 1981; Hilditch in progress) used by local craftspeople to produce medium to very coarse red brown vessels that occasionally were covered in an off-white or yellow slip

*Table 8.2 Summary data based on Ayia Irini excavations (Northern Sector) discarding practices.*

Period	% assemblage extant after discard	% imports in extant material	Calculated % imports in original assemblage
V	41	46	18
VI	12	73	9
VII	17	47	8

in order to reproduce the dark-on-light aesthetic popular in the late MBA and LBA Aegean.

This relatively understudied category was one of the main foci of the Ayia Irini Northern Sector Archaeological Project, since locally produced vessels provide particularly acute insights into the processes of cultural transmission and migration. Therefore, this section focuses on the preliminary results of two distinct strands of research pertaining to the local ceramic production: 1) the adoption and use of the potter's wheel, summarised briefly here but discussed in detail elsewhere (Abell and Hilditch, this volume; Gorogianni *et al.* 2016); 2) the choices of vessel shapes and their correlations with imports present at the site.

Information about the Period IV ceramic repertoire is derived from other parts of the settlement, since that material is not well represented in the Northern Sector. Traces of Minoan traits in local ceramic production are present almost from the reestablishment of the site in Period IV. The potter's wheel was first introduced in this period, although local potters did not show particular interest in using it (Abell and Hilditch, this volume; Gorogianni *et al.* 2016), rather following (for the most part) practices that were a locally idiosyncratic medley of Cycladic, Aeginetan, and Mainland traditions. The Period IV assemblage seems to conform to the Helladic/Cycladic aesthetic, preferring vessels with metallicising profiles.

Period V is well represented in the Northern Sector with five deposits; during this period the influence of Cretan culture on the Cyclado-Helladic cultural idiom becomes more pronounced at the site. The local burnished ware seems to wane in popularity, Cretan shapes are adopted, and a purely local ware known as Yellow-Slipped developed to conform to the matt-painted MC aesthetic is now reoriented to match the new standards.

The change is not only aesthetic but also technological. The aggressive adoption of the wheel during this period for small shapes both open and closed (Abell and Hilditch, this volume; Gorogianni *et al.* 2016; see also Davis and Lewis 1985) mainly of Cretan inspiration certainly contributed to the transformation of local production and tastes. The use of the wheel in local vessels increases from 2% of the assemblage in Period IV to 58% in Period V (Gorogianni *et al.* 2016). This widespread and enthusiastic adoption of this technology, which requires active participation and apprenticeship in a community of practice to become proficient, can probably be connected to a trickle of migration from Crete but also to the appeal of Cretan-like material culture on the consumer side, which signals the reorientation of the community's cultural focus towards Crete.

Nevertheless, this was not a process of cultural substitution, in which the residents, newcomers and not, said 'out with old, in with the new.' Preferences at the dinner table, as Table 8.3 shows, were almost equally

divided between open shapes of Minoan inspiration, such as conical, Keftiu, and semiglobular cups, and those of the Cyclado-Aeginetan tradition, mostly burnished or plain wares and shapes such as Cycladic cups, goblets, pedestal bowls, panelled cups,<sup>8</sup> as well as plates, saucers, and bowls (Table 8.3a). Cretan-inspired shapes, such as bridge-spouted or hole-mouthed jars, and rhyta, seem to dominate the category of closed shapes for pouring, whenever shape recognition is secure. Similarly, shapes of more mundane quality, such as baking sheets or trays (either flat or with tripod legs), lamps of different types (with a pedestal or with a stick handle) and pithoi, also betray the influence or even presence of groups from Crete. These shapes, especially, indicate the introduction of another 'new technology' in everyday domestic life that further supports the introduction of immigrants from Crete and especially women within the community of existing residents at Ayia Irini. And yet not all Cretan shapes were adopted in the Minoanised repertoire of the local ceramic production. The Minoan imports of the same period show that there were at least four shapes that do not have a local equivalent, the carinated one-handled cup, and a number of pouring vessels, such as the ewer, lentoid jug, the oval mouthed amphora, and the truncated jug (Table 8.3).<sup>9</sup>

The following period, Period VI, continues uninterrupted from Period V, with the persistence of the same trends; all of the same styles are in evidence in terms of decorative motifs and shapes as well as manufacturing techniques. The emphasis on the Minoan aesthetic, however, intensifies after the destruction at the end of the previous period, a destruction that provides the opportunity not only for rapid rebuilding, but also for the manifestation of the new aesthetic in the built environment with the first construction of units integrating 'Minoan' features and proportions (Gorogianni and Fitzsimons forthcoming).

Indeed, in many respects, the ceramic assemblage changes steadily. Local potters continue the practices of the previous period. After the overwhelming intensification of use of the potter's wheel during Period V, artisans in Period VI steadily increase the use of technology of rotative kinetic energy in the local ceramic production (Gorogianni *et al.* 2016, fig. 8a; see also Abell and Hilditch, this volume). Non-Minoanising shapes of the Cyclado-Aeginetan tradition, such as the Cycladic cup and goblet, are underrepresented, although they continue to be present in the assemblage (Table 8.3a). Minoanising shapes dominate in the preferences of producers and consumers. Wherever shape identification is secure in the sherd material, conical and semiglobular cups (in the open shape category) predominate in the Northern Sector, as do hole-mouth jars (in the medium-large closed category), and lamps, pithoi, trays or baking dishes (among the 'other shapes') in the plain or tripod variety.

The locally produced assemblage in Period VII presents an almost identical picture. The use of rotative kinetic energy

Table 8.3a Summary data based on occurrence of locally produced open shapes in the assemblage of the Northern Sector of Ayia Irini (Non-Minoan inspired shapes are in italics; shapes of indeterminable inspiration are underlined).

a. Open shapes	V	Shape in V Imports	VI	Shape in VI imports	VII	Shape in VII imports
<b>Bell cup or bowl</b>					0	yes
<i>Bowl</i>	3	yes			0	yes
<i>Bowl (flaring)</i>	0	no			1	no
Carinated one-handled cup	0	yes				
Conical cup	12	yes	7	yes	93	yes
<i>Cup</i>	0	yes	2	yes	1	yes
Cup with flaring rim	5	yes				
<b>Cycladic bowl</b>	3	no	0	yes	2	yes
<b>Cycladic cup</b>	29	yes	2	yes		
<b>Goblet</b>	12	yes	1	yes	2	yes
Globular one-handled cup			1	no		
<b>Kantharos</b>	2	yes				
Keftiu cup	9	yes	0	yes	0	yes
<b>Panelled cup</b>	0	yes			0	yes
Rounded cup	1	no				
Salt disc	1	no			0	yes
Saucer or ledge rim bowl	0	yes				
Semiglobular (rounded) cup	10	yes	1	yes	1	yes
<b>Spouted bowl</b>	0	yes			2	no
<i>Open vessel</i>	14	yes	8		1	yes
Total open shapes	101		22		103	
Total open shapes (%)	62		48		92	

Table 8.3b Summary data based on occurrence of locally produced medium-large closed shapes in the assemblage of the Northern Sector of Ayia Irini (Non-Minoan inspired shapes are in italics; shapes of indeterminable inspiration are underlined).

b. Medium-large, closed shapes	V	Shape in V imports	VI	Shape in VI imports	VII	Shape in VII imports
Alabastron					0	yes
<b>Amphora or hydria</b>	0	yes	0	yes		
<b>Beaked jug</b>	1	yes				
Bridge-spouted jar	4	yes	0	yes	0	yes
<b>Closed vessel</b>	6	yes	10	yes	0	yes
<i>Colar-necked jar</i>					0	yes
Ewer	0	yes	0	yes		
Hole-mouthing jar	1	yes	2	no		
<i>Jar</i>	0	yes	0	yes	0	yes
<i>Jug</i>	0	yes	1	yes	0	yes
<i>Large closed vessel</i>	9	yes	1	no	0	yes
Lentoid jug	0	yes			1	no
Oval-mouthing amphora	0	yes				
Piriform jar	0	no			0	yes
Rhyton	1	yes			0	yes
Spouted jar	0	yes	0	yes	0	yes
<i>Spouted jar</i>						
Truncated jug	0	yes				
Total medium-large, closed shapes	22		14		1	
Total medium-large, closed shapes (%)	13		30		1	

Table 8.3c-d Summary data based on occurrence of small closed and other shapes in the assemblage of the Northern Sector of Ayia Irini (Non-Minoan inspired shapes in italics; shapes of indeterminable inspiration are underlined).

<i>c. Small, closed shapes</i>	<i>V</i>	<i>Shape in V imports</i>	<i>VI</i>	<i>Shape in VI imports</i>	<i>VII</i>	<i>Shape in VII imports</i>
<i>Feeding bottle</i>			2	no		
<i>Small, closed</i>	0	yes	0	yes	0	yes
Total small, closed shapes	0		2		0	
Total small, closed shapes (%)	0		4		0	
<hr/>						
<i>d. Other shapes</i>						
<b><i>Basin</i></b>	3	yes			1	no
Blossom bowl						
<b><i>Button</i></b>			0	yes	1	no
<b><i>Cooking pot</i></b>	1	no			1	no
<b><i>Crucible</i></b>	0	no	0	no	0	no
<b><i>Firebox</i></b>					1	no
<i>Flower pot</i>			1	no		
Lamp			3	no	1	no
Lamp with stick handle	5	yes				
<i>Large open vessel</i>	0	yes				
<b><i>Lid</i></b>	3	no			1	no
<i>Marked sherd</i>					1	no
Pedestaled lamp	1	no				
Pithos	2	no	1	yes		
<b><i>Plaque</i></b>	1	no				
Strainer					1	no
<i>Table (pierced)</i>	1	no				
Tray (baking dish)	14	no	2	no	0	yes
Trefoil-mouthed strainer jug (double vase)						
Tripod tray (baking dish)	9	no	1	no	1	no
<b><i>Tripod spouted cup</i></b>						
Total other shapes	40	0	8	0	8	
Total other shapes (%)	25		17		7	
Total	163	0	46	0	112	

increases very moderately proportionately to the previous period (Gorogianni *et al.* 2016, fig. 8a; see also Abell and Hilditch, this volume). Moreover, Minoan shapes (Table 8.3) again seem to be present in the assemblage, such as semiglobular and conical cups (in the open shape category), lentoid jugs (in the medium-large closed), blossom bowls, fireboxes, and lamps (in other shapes), while shapes of the Cycladic and Helladic tradition are also present, such as the goblet and the Cycladic bowl.

Finally, the sole Period VIII single deposit from within the Northern Sector contains only one locally produced cup or tumbler out of 63 specimens (all the rest are imported mostly open shapes) that were preserved for study and publication; therefore not much can be said about local production during this period. Morris, who has studied the deposits of this period extensively, maintains that the greatest proportion of the deposits are made up of domestic wares which were probably local, since she describes them

as having a “smoothed, dark red surface” (Morris and Jones 1998, 191). Among the domestic wares, the typical shapes are tripod cooking pots, jars and conical cups (Morris and Jones 1998, 191), and there is also a local coarse carinated kylix that imitates Mycenaean fine ware prototypes (Morris and Hershenzon n.d.). Although full publication of the deposits of this period must be awaited, based on Morris and Hershenzon’s preliminary observations and on the meagre evidence from the lone Period VIII deposit in the Northern Sector, a drastic change appears to have occurred in the ceramic landscape of the site with the local pottery being produced only in the plain ware category.

## Discussion

To summarise the trends represented in the data from the Northern Sector (Table 8.3), the assemblage of Period IV

is characterised by choices of shapes that bear affinities to contemporary Cycladic and Aeginetan traditions with continuity from the shape-ranges of earlier periods elsewhere in the region. The first physical manifestations of the beginning of cultural change towards the Minoan tradition are only present in 2% of the assemblage, mostly small open shapes, that had been produced on the potter's wheel. In the next period, Period V, some of the shapes, mainly open ones for the consumption of drink and food, continue to bear affinities to the Cyclado-Aeginetan-Helladic tradition, but the assemblage also includes a substantial portion of Minoan-inspired shapes in all categories, such as open for serving, closed for pouring, and special shapes, such as lamps and baking dishes. The range of shapes that are imitated during Period VI and VII is narrower in all categories (except perhaps the specialty shapes of Minoan-inspiration).<sup>10</sup> It is also clear that the multivalent nature of the reference networks is maintained with affinities to Crete, the Mainland, and the Cyclades, although the absence of popular drinking shapes on Crete (*e.g.*, the ogival cup) in Period VII may indicate that the dining table fashions of the Mainland, rather than that of Crete, were influential at Ayia Irini. This trend, which is otherwise obscured by the general preference for Minoan shapes both at Ayia Irini and the Mainland palatial centres, is consonant with Mountjoy and Ponting's findings that indicated that almost all tested imported vessels of Period VII belonged to the so-called 'Athens super-group' rather than having been imported from Crete (Mountjoy and Ponting 2000). Although the data from the Northern Sector is limited for Period VIII, Morris and Hershenson's work seems to imply that the local ceramic production changes character and is altered to produce predominantly domestic wares.

At first glance, the data appear to substantiate the obvious, underlying proclamations that were made decades ago: Ayia Irini was Minoanised but at the same time maintained a strong connection to the Mainland, especially during Periods V to VI, and later the cultural focus shifts towards the Mainland palatial centres (Barber 1987, 161; see also Cummer and Schofield 1984, 144–146). Nevertheless, putting this data into perspective and in context with data from other artefactual categories allows a much more complex picture to be drawn for the site, one that overcomes binary oppositions between local and non-local, Minoanised and non-Minoanised.

As stated above, Ayia Irini was re-established anew in Period IV over the remains of the EBA settlement. Recent interpretations of the material assemblage have suggested that the original population was composed of settlers from Central Greece, Aegina, and Crete (Overbeck and Crego 2008; Crego 2010; Abell 2014b); these settlers were probably a mixed population of men and women, since material culture that is customarily linked with female productive activities, such as textile work and

food production, is attested even in the earlier phases of Period IV (Cutler 2012; Abell 2014b). Thus, although the ceramic assemblage betrays affinities predominantly to the Aeginetan-Helladic groups of the community, the presence of technologies, such as the first signs for the potter's wheel, the upright loom, and the tripod cooking pot, attest to the presence of a group originating from Crete, a group that included women and was probably intermarried within the community.<sup>11</sup>

This original population of 'apex families' (Anthony 1990, 904) seems to have grown over time and reached a population requiring a larger area for the activities of the resident groups, which is the justification usually given for extending the boundary of the site and for the construction of a new fortification wall to the north of the previous line of fortification. If this hypothesis is correct, then the population growth at the end of Period IV should probably be attributed both to the growth of the original settling families and also to a contributing migration stream, or trickle in the case of Ayia Irini, probably originating from the places of origin of the original settlers (Anthony 1990; 1992). Indeed, the assemblage of Period V preserves strong affinities both to Crete and also to the Cyclades and the Mainland in terms of style. Nevertheless, whatever potter(s) were responsible for the production of both the Minoan and non-Minoan shapes seem to have been well-versed in the use of the local raw materials and recipes because there is essentially no difference macroscopically in the recipes used for either category (Hilditch in progress), which perhaps indicates the 'naturalisation' of distinct migrant communities to form a unified local one whose ways of doing things preserve elements of the 'old countries' reinforced by continued network contact with places where those shapes were dominant in local production and use. Indeed, although the archaeological record for this period is patchy because of the LBA overburden, deposits do not seem to be characterised by concentrations that could amount to distinct cultural groups. This cultural mix is also understandable in view of the small size of a community that promoted face-to-face interaction and mutual dependence for survival.

This formulation, if valid, calls into question the meaning of the terms 'local' or 'non-local' in discussions of material culture. In a recent paper by Abell and the author, it was suggested that "the regular and intimate interaction among people, techniques, and things aided [...] in the forging of a new local identity, one that involved an element of cosmopolitanism that linked the community with different parts of the Aegean," a process that the authors called 'material naturalisation' (Abell and Gorogianni 2014; see also van Dommelen 2006, 137). Studies on modern immigrants show that integration or assimilation is usually achieved within three to four generations, whereas factors such as choice of residence (in a homogeneous ethnic enclave or in a culturally mixed neighbourhood) and degree

Table 8.4 First appearance of elements in the ‘Minoan cultural package’.

Minoan cultural package		IV	V	VI
Pottery	(imports)	X		
	(emulation of shapes)	X	X	
	(emulation of decoration)		X	
	(use of potter’s wheel)	X		
Cooking technology	(tripod cooking pots)	X		
Textile production	(upright loom)	X		
Administrative technologies			X	X
	(metrology)			
	(writing)	X		
Wall paintings			X	
Architecture			X	
Religious practices [after Caskey 1971, 394]			X	

of interaction with the host community, among others, speed or slow down the process (Rumbaut *et al.* 2006; Jiménez 2011; Kandler and Caccioli 2015). In the case of a small community like Ayia Irini, it is safe to assume that interaction between distinct cultural communities was intense and that people could not avoid being exposed to each other and their material culture. Thus, within the span of five generations (Table 8.1), the perception of ‘local’ is certain to have changed, and perhaps it may not be justified to evoke ‘emulation’ of foreign prototypes past perhaps the middle or end of Period V, at least in terms of pottery usage and production.

If the population of Ayia Irini was Minoanised (as well as Aeginetinised and Helladicised), does this mean that they were so in every element of the whole so-called Minoan package? Table 8.4 summarises the data for the first appearance of different elements of the Minoan package and suggests an answer to this question. If the archaeological record is not skewing our picture of the earlier periods, the table shows a scaled introduction of different elements and media. Some of these elements made their first appearance in early deposits of Period IV (technologies of the potter’s wheel, upright loom, and Cretan cuisine or at least Cretan cooking equipment, some pottery shapes) and Period V (additional pottery shapes and decoration, administrative practices), and others were made manifest in later phases, such as Period VI (architecture, wall paintings, and religious practices). Therefore, is it still justifiable to call them a package (apart from their shared inspiration from Minoan cultural practices) if they were introduced at different times (probably as a result of different processes) and were most likely products of different historical and socio-political circumstances? Probably not.

If cultural change, such as the local production of material culture based on Minoan prototypes, at Ayia Irini in Period IV and V can be connected to small scale population

movements,<sup>12</sup> specifically the migration of a small number of families bringing technological and cultural knowledge, slightly different processes must be hypothesised for other media in Periods VI and VII, especially since this cultural mix did not produce an entirely distinctive cultural idiom but continued to operate within the confines of a Minoan inspired koine in the Aegean. Implements for textile production, as well as architecture and wall painting, reveal the variability of processes that contributed to the change of material culture locally, which occurred over a long period of time.

After the initial introduction of the vertical loom with its discoid loom weights in Period IV, local craftswomen continue to use it for their creations well into Mycenaean times. Excavations of the site yielded locally manufactured loomweights of the discoid variety (Cutler 2011; 2012; Gorogianni *et al.* 2015) showing the total and exclusive appropriation of this technology locally. Nevertheless the recovery of discoid loomweights in non-local fabrics from the same deposits (Gorogianni *et al.* 2015) indicates that this process of appropriation was not an exclusively local phenomenon, and highlights the operation of a network of associations between the site and other Aegean locales from which these loomweights came along with their associated weavers. The inference is that this technology was not only introduced by the first Cretan immigrants, but its continued use was supported and perhaps reproduced through a network of associations with sites/nodes beyond Ayia Irini that were also using this same technology. Thus, it is justifiable to suggest that these technologies, as well as their associated aesthetic ideals, over time became part of the Aegean cultural mainstream especially by LM IA (Davis and Gorogianni 2008).

The building of architectural spaces with wall paintings in emulation of Minoan prototypes similarly supports the participation of the site in a new environment, in which a Minoan inspired cultural idiom is the language of power. Yet it also provides great insight into additional processes and agents’ actions during Periods VI and VII. The building of such edifices and their decoration surely presumes the presence of a commissioner, an overseer/architect/master painter and a building/painting crew with each one of these roles implying different transmission processes. From the point of view of the commissioner(s), this person or group was surely part of the aspiring elite at Ayia Irini who wanted to assert their position within the community (Gorogianni and Fitzsimons forthcoming) by using the vocabulary of power in the region that referenced the palatial culture of Minoan Crete, which had entered the cultural mainstream of the Aegean and been brokered by a number of Aegean agents from several Aegean sites. If the desire for such a space implies the emulation of practices of predominant fashions for political reasons, the actual concept and execution of the commissioned space presupposes an experienced master/

overseer and crew who were well versed in the local building techniques with the materials (and their idiosyncrasies) locally available, as well as in the predominant fashions.

Lyvia Morgan, in her forthcoming book about the wall paintings of the Northeast Bastion, argues convincingly that the crew responsible for the miniature frescoes of the Northeast Bastion was composed of an itinerant master painter and “a combined workforce of local craftsmen alongside experienced painters from Crete and/or Thera (and perhaps Melos)” (Morgan forthcoming a, 732). This suggestion strives to explain the truly entangled nature of the wall paintings, which, although they are clearly embedded in the Minoan rules for the medium (which in turn implies experienced craftspeople belonging to a wider community of practice) and innovative, nevertheless preserve evidence of less experienced hands (*e.g.*, the ones responsible for the “delightfully quirky” male figures) that should be attributed to a local craftsman (Morgan forthcoming a, 726–732).

Morgan also problematises the issue of whether the wall painters should be considered distinct from the masons that were responsible for the structure. Although she does not provide a definitive answer, she notes that there may have been no such distinction because the Linear B texts preserve references to masons and carpenters but not to wall plasterers or painters (Morgan forthcoming a, 730–731). Therefore, wall paintings and the architectural spaces in which they were executed were probably the products of the same diverse ‘workshop’ responsible for both the edifice and its decoration.

The introduction of Minoan style architectural elements as seen in the Northeast Bastion, in House A (the eastern part of it), and in other buildings of the settlement, seems to reflect the same entanglement (see Gorogianni and Fitzsimons forthcoming). On the one hand, the design of spaces in terms of the organisation of rooms, their functions, dimensions, and general layout, betray affinities to Minoan style banquet halls on Crete (Graham 1961; Driessen 1982; Letesson 2013), and concomitantly should be attributed to masons or architects that belonged to communities of practice that built spaces in this particular idiom. On the other hand, the walls themselves were built out of the same schist and marble slabs that were locally available and had been used in the traditionally local axial houses that are widespread across the entire site.

One question at this point is whether or not the experienced master/overseer was dispatched from the palaces of Minoan Crete, which in turn raises the question about the degree of active palatial participation in driving the trends of cultural change in the Aegean. There is no doubt that the palaces, especially Knossos, during Period VI or LM IA, were at the height of their power and perhaps more actively involved in the trade of added value commodities, such as pottery, alongside metals (Sherratt 1999, 176–177) than in the previous period. The data from

imports to the Northern Sector preserve a glimpse of this process (Gorogianni in progress). Cretan imports continue to comprise the predominant type of import. Nevertheless, although the proportion of Cretan imports from all of Crete remains the same as during the previous period, the analyses from the Northern Sector show that imports from a North-central Cretan origin increased dramatically over the previous period to the detriment of imports from other Cretan locales. Similarly, in contrast to the previous period in which trade was split between the trade of commodities in storage containers and trade of open shapes, in Period VI imported open shapes markedly increased in comparison to closed ones, further substantiating a change in the character of trade between the two locales.

Therefore, it is quite possible that groups associated with the palace of Knossos were promoting the intensification of ties with Ayia Irini at this time by sending out a master painter or architect to assist with the building of the Northeast Bastion. The Northeast Bastion, though, was hardly the only building with Minoan-style features built during this period (in fact, the first phase of House A and House C were also built during Period VI), which suggests on the one hand that prosperity was widespread among the groups of the site and allowed for greater investment in the architectural landscape of the town, and on the other hand that perhaps this building activity reveals competition among family groups (Gorogianni and Fitzsimons forthcoming). However, the exact involvement of palatial agents in this general competitive climate is unknown, but perhaps the expansion of House A and its dominance in Period VII might perhaps be indicative of which family group ended up winning the support of the palace agents and the control of the site.

As stated above, although Cretan palace societies were certainly at the height of their power, they may not have been driving the Aegean trends toward emulation deliberately. By Period VI, the Aegean world had already incorporated the Minoan aesthetic into the idiom of the major production centres. This trend is not observed only in the production of local products that conform to the Minoan aesthetic but also in the importation of Minoanising products from non-Cretan production centres, places like Aegina, Melos, and the Mainland. A survey of the motifs that appear on the local and imported pottery of Period VI in the Northern Sector shows that motifs such as ripple, spirals and floral designs are found on all of the predominant fabric categories; similarly, shapes like the Keftiu, straight-sided and semi-globular cups, and bridge-spouted jars are also present in almost all the major fabric categories, local or imported (Gorogianni in progress). Therefore, appearing Minoan may not have been a conscious consideration any more than appearing fashionable and *en par* with the Aegean neighbours, an objective that perhaps took comparatively little effort for ‘early adopters’ such as Ayia Irini, even though the site was not a major production centre, at least in terms of exports.

Appearing fashionable, or more Minoan, was indeed the goal in Period VI, but the question that arises is who was the target group that the residents of Ayia Irini sought to convince by putting on Minoan airs? The answer inevitably involves the regional context, since it is unlikely that any Cretan, at least of the palatial kind, would have been impressed by these efforts. If the relationship of Ayia Irini to Attica, at least the southern tip of it, was initially one of exploitation of the latter (especially considering that Ayia Irini was established as an off-shore settlement for the exploitation of the metal resources of the Lavrion region), it is during this period that the balance seems to shift. Even though the interrelations between Attica and Kea are too complex to be treated here, it suffices to say that signs for increasing socio-political complexity in Attica, and especially in Thorikos (Papadimitriou 2010; see also Servais and Servais-Soyez 1984), support the emergence of a group that perhaps sought to control closely the coveted metals, a group with which Keian entrepreneurs had to negotiate a little more intensely (or more competitively) than before, leading to a tightening of sorts in the relationship between the two regions.

This cultural rapprochement is rather difficult to detect in the local ceramic assemblage because of its multicultural character with Cycladic, Cretan, and Helladic shapes being used at the same time, and the general Minoanisation of the early Late Helladic repertoire (Table 8.5). Yet, one aspect of the shape repertoire perhaps indicates most clearly that the cultural focus for Ayia Irini producers and consumers shifts away from Crete: notably absent from Period VII assemblages (LM IB/LH IIA) of the Northern Sector (and probably the rest of the site for that matter), is the ogival or S-profile cup, which seems to be ubiquitous in LM IB assemblages on Crete at this time (Brogan and Hallager 2011). The absence of this vessel type signifies that Ayia Irini drinking and dining fashions do not follow Cretan ones, even though the predilection for conical cup use does not cease and continues to be produced well into period VIII. At the same time, no clearly Mycenaean shapes, such as the rounded goblet, or the alabastron are introduced in the local production either. Yet, the growing importance of Mainland production centres, to the detriment of the close link between Crete and Ayia Irini, is also reflected in the imported wares (Gorogianni and Abell forthcoming; see also Mountjoy and Ponting 2000), as well as the first appearance of elite artefacts that bear strong associations with Mycenaean culture, such as the boars' tusks from a helmet (Cummer and Schofield 1984, 95, no. 1083; see also 134, no. 1689; Schofield 2011, 65, no. 700; also 74–75, nos. 880, 881, 897; also 176, no. 2110) and a proto-Phi figurine (Cummer and Schofield 1984, 59, no. 241) (see Table 8.5).

The following period, Period VIII, sees these trends exaggerated. Imports from Crete are substantially reduced (Gorogianni and Abell forthcoming) and local production

*Table 8.5 First appearance of elements in the 'Mycenaean cultural package'. The elements of the package or else cultural diacritics are compiled based on the lists provided in Feuer 2011 (512–514).*

Mycenaean cultural package	VI	VII	VIII
Pottery (imports)			X
(emulation of shapes)			
(emulation of decoration)			
Cooking technologies			X
Textile production			
Administrative technologies			
(writing)			
Wall paintings			
Architecture (secular)			
Architecture (mortuary)			
Religious practices (figurines)		X	
Mortuary practices			
Personal adornment (boar's tusk helmet)		X	
Wanax ideology			

seems to undergo a change of character. On the one hand, local ceramic production seems to have been reduced, if not in production volume then definitely in the variety of wares produced. Even though the raw materials of the island were never conducive to fine wares or tablewares per se (e.g., see Schofield's comment in Cummer and Schofield 1984, 145), in the previous periods the local workshop(s) did produce painted tablewares that were used (or at least found) in the same contexts as their imported counterparts. Nevertheless, in Period VIII Mycenaean fine wares of different types and provenance seem to eclipse almost totally the need or desire for such vessels in the local fabric, leaving to the local workshops mostly utilitarian or otherwise domestic wares. Moreover, this substitution should also be interpreted as evidence for a change in the economic realities of the site as well as in the Aegean as a whole. Conversely, the persistence of shapes that are considered 'Minoan' in the local ceramic production, whose origins had been 'Minoan,' such as the tripod cooking pots as well as the conical cups, perhaps indicates a continuation of the local population element which did not change their cooking habits and continued 'traditional' practices in the face of increasing Mycenaean influences (even though there are occasional specimens of Mycenaean style cooking wares at the site).

## Conclusions

This volume focuses on whether processes of acculturation often called Minoanisation and Mycenaeanisation are similar to or different from each other. In an effort to evaluate this hypothesis considering the site of Ayia Irini, an important site for intercultural contact, this paper examined locally

produced pottery from the Northern Sector of Ayia Irini and considered it in conjunction with inferences gauged by other categories of craft production, such as textile production, wall painting and architecture. This investigation has shown, at the very least, that the processes of Minoanisation and Mycenaeanisation, even though reified for research purposes, are in fact not uniform nor can they be explained by a single phenomenon or process. The diachronic analysis and the tracking of the timing of first appearance of cultural diacritics that have often been considered to compose a cultural package shows clearly that these elements were introduced into the Keian cultural idiom over the course of several centuries, defying their attribution to a single explanation or to a singular cultural package. Indeed the archaeological assemblage seems to have been produced by a number of processes and agentic responses that range from small scale migrations, to the Versailles effect, eclectic emulation of culturally powerful prototypes, to name a few.

Moreover, the paper also aims to problematise the meaning of local culture as it is implied in the unpronounceable title, especially in the case of Ayia Irini, a settlement that seems to have been founded by a multicultural population in Period IV and preserved its multicultural flair throughout until its partial abandonment at the end of Period VIII or LH IIIA. At least in the case of Minoanisation, Minoan fashions and technologies (especially those that have to do with pottery and textile production) seem to be fully incorporated in the local idiom and, dare I say, identity just as much as Mainland and Cycladic ones. If Minoanising trends get to stand out more prominently, this is owed to the fact that Minoan fashions seem to be the visual language of power, one that could have been perhaps promoted by the Cretan palaces deliberately, especially in Period VI or LM IA. Nevertheless, what is becoming increasingly clear is that the establishment of Minoan fashions and their incorporation into the idioms of the Aegean sites is amplified by the Aegean network in the fact that the trade and exchange partners of Ayia Irini had also selectively adopted Minoan elements, albeit to differing degrees and by different social groups.

As for Mycenaeanisation, the paper suggests that perhaps the processes had already started earlier than LC II, the period usually hailed as the start of the phenomenon. The general Minoanisation of the Aegean, including that of the early Mycenaean elites, definitely obscures to an extent the processes at work, and so does the fact that Ayia Irini was abandoned as a residential site at the end of Period VIII, not allowing us to witness the transformations at their most diagnostic in LH IIIB and LH IIIC, just as we do on Naxos or Kos (see Vitale this volume; Vlachopoulos this volume). Nevertheless, it is clear that the influence of Mycenaean palatial society did not have the same impact on local material culture as Minoan had done in the past. In fact, Mycenaean adoptions seem to be rather superficial additions rather than truly incorporated in the local idiom,

of which pottery is a supreme example; even though imports seem to substitute almost completely local production of fine wares, local craftspeople do not imitate Mycenaean wares or insert technological markers used in the production of Mycenaean pots (Abell and Hilditch, this volume). Nor was architecture or other categories of material culture affected apart from the importation of Mycenaean style figurines or the boar's tusk helmet retrieved from House A.

All in all, Mycenaeanisation appears to be an elite strategy which attempted to preserve the importance and function of the site as a transhipment centre for the metals trade, a strategy that did not seem to bear fruit as Ayia Irini was ultimately abandoned as a residential site at the end of Period VIII and continued only as a focus for ritual activity (Caskey *et al.* 1986; Caskey 2009; Gorogianni 2011). This abandonment should be considered and explained in the context of altered corridors of maritime traffic that focused on east to west passages, rather than north to south ones, considering the flourishing of islands, such as Naxos, and the islands of the Dodecanese, premier stopping points on the journey to the eastern Mediterranean, as well as altered routes for accessing the ores of Lavrion overland.

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### Notes

- 1 A selection of publications include: Abell 2014b; Bikaki 1984; Caskey 1962; 1964; 1966; 1971; 1972; 2009; Caskey *et al.* 1986; Crego 2010; Cummer and Schofield 1984; Davis and Lewis 1985; Davis 1979; 1980; 1984; 1986; Davis *et al.* 1983; Gale *et al.* 1984; Georgiou 1986; Gorogianni 2008; 2011a; 2013; Hershenson 1998; Morris and Jones 1998; G. F. Overbeck 1984; Overbeck and Crego 2008; J. C. Overbeck 1984; 1989; Petruso 1992; Schofield 1982; 1990; 1998; 2011; Wilson 1987; 1999; 2013.
- 2 Caskey was rather cautious on the subject, limiting himself to statements that harbored no uncertainty or speculation, and

- viewing the site as a trading post of sorts. He used the term ‘Cretan’ when absolutely sure of the provenance of an artifact, especially ceramics, and allowed for the use of ‘Minoan’ as a general stylistic term.
- 3 With the exception of Abell 2014a and Gorogianni *et al.* 2016.
- 4 The new establishment at Ayia Irini was started by a diverse group of settlers that probably originated from Central Greece (Overbeck 1982; Overbeck and Crego 2008), Aegina (Crego 2010), and Crete (Abell 2014b).
- 5 The evidence comes from the excavations of the theatre conducted by Dr. Tania Panagou, under the auspices of an EU funded project that targets the conservation and restoration of the monuments at Karthaia, directed by Prof. Eva Simantoni-Bournia of the University of Athens (Bournia *et al.* forthcoming; Panagou 2012). The theatre is located in the south slope of the acropolis of Karthaia and dates to the 4th c. BCE. Excavations revealed that the theatre’s *koilon* was built on top of a layer of deliberate fill, under which topical excavations uncovered prehistoric deposits (Panagou 2012). A preliminary inspection by Ayia Irini researchers, including Gorogianni, verified that the ceramic assemblage dates to early Period IV and contains almost the entire range of imports found at the contemporary settlement of Ayia Irini.
- 6 The population estimates for Ayia Irini vary widely. Originally, the population of Ayia Irini during the main phases of the settlement was estimated between 780–1250 people based on equivalencies with Phylakopi (Davis 1984b, 18), a population size that was broadly comparable to the one residing in the *polis* of Koressos (Cherry *et al.* 1991, 229–230; Whitelaw and Davis 1991, 280). Most scholars (Schofield 1998, 119; see also Wiener 2013, 154), find this estimate to be unlikely and lower the population estimate. Recently, Whitelaw has suggested a global density of 200–225 persons/ hectare for Neopalatial towns (Whitelaw 2001, 27), which would make Ayia Irini, at 1.2 ha, a town of 260 people. Even though, as Whitelaw himself cautions, Aegean urbanism is not a unitary phenomenon, his estimates approximate urban densities on the island in modern times (pre-WW II), which are reported to be as high as 280 persons/hectare (Whitelaw and Davis 1991, 281, n.7). Therefore, 280–335 residents is a more plausible population estimate for the early LBA habitation.
- 7 A population of  $500 \pm 100$  residents is the suggested demographic threshold beyond which face to face interaction is discouraged and more complex structures start to emerge (Johnson 1982; Upham 1990; Feinman *et al.* 2000).
- 8 The panelled cup should also be added to this list. Even though there are no extant specimens from the Northern Sector, it is one of the most common cup shapes of Period V, even though it is not as common in the local fabric (see Davis 1986, 85–86).
- 9 The absence of at least locally produced ewers and oval mouthed amphorae might be attributed to an accident of preservation rather than a conscious choice on the part of the consumers at Ayia Irini, since the shapes occur in other periods of the settlement.
- 10 This phenomenon might very well be attributed to an accident of preservation, even though a cursory look at the deposits from House A from this same period reveals a few more shapes (bowl, footed saucer, saucer, and loop-handled bowl).
- 11 These Cretan technologies appear in archaeological deposits of Ayia Irini in Period IV and almost contemporaneously at Kolonna (Cutler this volume; Gauss and Smentana 2007; Abell 2014a), with the exception of the potter’s wheel which shows up earlier (Gorogianni *et al.* 2016; Gauss 2007; Abell 2014a). Compared to the other Cycladic Minoanised settlements, Ayia Irini was an early adopter, therefore it is fair to hypothesize that Cretan groups came to the island directly from Crete or via Aegina. The funerary evidence from Period IV (see G. F. Overbeck 1984; 1989; Gorogianni and Fitzsimons forthcoming) is also suggestive of this mélange of traditions, as the architecture of the graves is consistent with the Helladic and Cycladic traditions.
- 12 The earthquake that ravaged Crete at the end of MM IIB might have also been extra impetus for migration.

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# ADOPTION AND ADAPTATION IN POTTERY PRODUCTION PRACTICES: INVESTIGATING CYCLADIC COMMUNITY INTERACTIONS THROUGH THE CERAMIC RECORD OF THE SECOND MILLENNIUM BC

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## Introduction

The Cyclades, the archipelago located between the political cores of Minoan Crete and Mycenaean Greece, is a key location in which to address the phenomena of Minoanisation and Mycenaeanisation in the Aegean. For over 30 years, material culture change within settlements of the Cyclades has been considered within the purview of growing Minoan influence in the southern Aegean, with the first major edited volume on the matter appearing in 1984 (Hägg and Marinatos 1984). Then, as now, discussion focused especially on the three largest and most thoroughly excavated settlements of the second millennium BC: Phylakopi on Melos, Akrotiri on Thera and Ayia Irini on Kea (Davis and Lewis 1985; Barber 1987; Davis 1986; Davis and Cherry 1990; Wiener 1990; Papagiannopoulou 1991; Broodbank 2004; Knappett and Nikolakopoulou 2005; 2008; Berg 2007a; 2007b; Davis and Gorogianni 2008; Hilditch 2008; Nikolakopoulou *et al.* 2008; Nikolakopoulou 2009; Abell 2014b). An ongoing problem is the rarity of studies focusing on differences in how Cycladic settlements engaged with the Minoanisation phenomenon, or how the material correlates of the phenomenon changed over time (Davis and Cherry 1990; Broodbank 2004; Berg 2007b; Gorogianni *et al.* 2016). Less attention still has been given to unravelling the processes through which Mycenaean objects and practices became common in the Cyclades, with studies focused primarily on the LC III period (Barber 1987; 1999; Schallin 1993; Mountjoy 2008; Earle 2008; 2012). To address these issues, our paper takes an explicitly

ceramic perspective for investigating Minoanisation and Mycenaeanisation across the Cyclades. Recent work on production practices and the spread of technological knowledge between Cycladic, Minoan and Helladic potting communities of the southern Aegean within Minoanised assemblages is discussed so that the merits of using such an approach for the Mycenaeanisation phenomenon can be more fully considered. By evaluating the adoption of new technological practices and their adaptation within existing island production traditions, our aim is to highlight the variety of interactions taking place at island settlements *before and during* these phenomena and to compare their impact upon the Cycladic ceramic record during the second millennia BC.

## Focusing on the Cyclades

By the early 20th century, the settlements and cemeteries of the Cycladic islands had been incorporated into a single cultural sequence, using the conventions of the tripartite system that was first developed at Knossos by Arthur Evans; Duncan Mackenzie, who worked with Evans at Knossos, also oversaw the systematic excavation of the site of Phylakopi on Melos, upon which the general framework for Cycladic chronology is based (Atkinson *et al.* 1904; Barber 1987, 20–42; Whitelaw 2005). Phylakopi remained the largest excavated Cycladic site for over 60 years, until John L. Caskey began excavating at Ayia Irini on Kea

*Table 9.1 Comparative chronology of the Aegean, after Knappett and Nikolakopoulou 2008, 3; Abell 2014b, fig. 5. \*SDL = Seismic Destruction Level; VDL = Volcanic Destruction Level.*

Crete	Akrotiri Thera	Phylakopi Melos	Ayia Irini Kea	Mainland Greece
LM III		City III-iii	Period VIII	LH III
LM II		City III-ii	Period VIIc	LH IIB
LM IB			Period VIIa–b	LH IIA
MM IIIB?–LM IA	SDL, VDL*	City III-i	Period VI	LH I
MM IIIA–MM IIIB?	Phase D	City II-iii	Period IVc–V	MH III
MM IIIA	Phase C		Period IVa–b	MH II
MM II	Phase B	City II-ii		MH I
MM IB	Phase A			
MM IA	City I-ii/iii	Gap	EH III	
EM III				

in 1960, which was quickly followed by excavations at Akrotiri on Thera by Spyridon Marinatos in 1967. The material culture of Phylakopi, Ayia Irini and Akrotiri has proven difficult to synchronise throughout the Bronze Age, no doubt exacerbated by the uniform imposition of the tripartite chronological system across the whole archipelago (Nikolakopoulou *et al.* 2008, 322). There are many shared material traits between island communities in the Bronze Age, but Robin Barber, a leading scholar of Cycladic pottery, acknowledges that these assemblages reveal a ceramic repertoire that is ‘broadly unified... [but also] locally modified’ (1987, 144). It is these local modifications that hold the greatest potential for unpacking how Cycladic communities engaged with ‘other’ ways of doing things across broader regional interaction networks.

The later part of the Middle Bronze Age (MBA) at Phylakopi (City II-iii) and Ayia Irini (Period V; Table 9.1) marks the beginning of changes in local material culture at these settlements with Cretan (*i.e.*, Minoan) and Cretan-style (*i.e.*, Minoanising) objects, technologies and imagery becoming much more common (Scholes 1956, 38–39; Barber 1984; Davis 1986; Papagiannopoulou 1991; Broodbank 2004). Recent study of MC deposits from the pillar pits at Akrotiri has demonstrated similar timing for the beginning of the phenomenon, in Phase C (Nikolakopoulou *et al.* 2008; Knappett and Nikolakopoulou 2008; Nikolakopoulou forthcoming). By Late Cycladic (LC) I, Minoan and Minoanising material culture was even more ubiquitous within the settlements, including ceramics, stone vessels, frescoes, architectural forms, metrology, industrial technologies and ritual paraphernalia. The reasons why such Minoan and Minoanising objects were adopted by these Cycladic communities have been much disputed, as each

had a long history of occupation before the Minoanisation phenomenon began. The long-held Creto-centric view argued that these changes in material culture reflected the political and/or military takeover of Cycladic settlements, with Cretan power maintained by the presence of one or more palatial representatives within Cycladic settlements (*e.g.*, Branigan 1981; 1984; Niemeier 2009; Wiener 1991, 2013). Proponents of recent postcolonial approaches reject the idea of direct control of Cycladic communities by Cretans, or, at least, the idea that it is possible to reconstruct direct political or military control on the basis of archaeological remains. Such arguments typically focus on explaining Cycladic strategies that privileged Minoan ways of doing things as high value, whether in economic or social terms (Davis 1984; Davis and Lewis 1985; Knappett and Nikolakopoulou 2005; 2008; Davis and Gorogianni 2008). Studies focused on the process of Mycenaeanisation, although rarer, tend to follow similar trajectories, either suggesting a Mycenaean takeover rooted in military or political action (Barber 1987; 1999), or a cultural shift similar to that hypothesised for Minoanisation, in which Cycladic islanders adopted elements of Mycenaean culture as part of internal social strategies (Schallin 1993), despite being less able to access especially high-value objects because of economic centralisation on the part of Mycenaean palaces (Earle 2008; 2012). However, as Mountjoy (2008, 469) noted, a lack of excavation and publication of Late Bronze Age (LBA) settlements to date means that ‘we simply do not know enough to say why some cultural traits were adopted, or whether or how the Mycenaeans influenced the indigenous religion and burial habits or the politics or economy of the islands’. Accordingly, this paper focuses primarily on the better documented Minoanisation phenomenon, before turning to a brief discussion of interaction between the Cyclades and early Mycenaean culture, using Ayia Irini as a case study.

That the definition of what constitutes Minoanisation, Mycenaeanisation or for that matter any ‘-isation’ phenomenon, can be highly varied is discussed in detail elsewhere in this volume. In Cycladic archaeology, the recent emphasis on Minoanisation as *process*, *i.e.* what it constitutes and how it spread, has led to a reassessment of island communities and their material culture assemblages during different stages of the phenomenon (Berg 2007a; 2007b; Davis and Gorogianni 2008; Knappett and Nikolakopoulou 2008; Hilditch 2008; Abell 2014b). It is important to acknowledge assumptions on the sociocultural coherence of these island communities and their material culture assemblages when considering intra-regional responses to wider phenomena. Todd Whitelaw’s (2005) reassessment of Phylakopi on Melos provides a detailed consideration of variability within the traditionally perceived monolithic phenomenon of Minoanisation. Whitelaw (2005, 60) emphasises “the actively negotiated character of Minoanisation as a strategy” by social groups

or communities at Cycladic settlements, with each Cycladic site engaging ‘‘to varying degrees in different exchange networks, in which exchange with Cretan sites can be seen to be just one component’’. He argues for intra- and inter-community variations in engaging with Minoanisation as a status strategy, specifically among the elite at Phylakopi (Whitelaw 2005, 59–61). By distinguishing between elite (mostly non-ceramic) and everyday (ceramic) material traits, his analysis offers a means to ‘unpack’ the range of activities taking place within and between island communities under the aegis of Minoanisation. He suggests that at an elite level at the beginning of the LC period, Akrotiri displays significant engagement with Minoanisation as a status strategy, Ayia Irini shows a broadly constant level of engagement over time, while the Phylakopi community can be seen as rejecting Minoan practices, given the shift in focus away from the Minoanised Pillar Rooms Complex and other non-ceramic material strategies (Whitelaw 2005, 60–61). In other words, Minoanisation is a ‘strategic and variable phenomenon, not uniform, imposed or inevitable’ (*ibid.*) and the scale of investigation can have a significant affect upon the answers produced, particularly if we focus on the adoption of Minoan technologies and practices at a local production level rather than assuming the regional presence of Cretan emigrants within Cycladic settlements. While Whitelaw (2005) emphasizes variable elite strategies for engaging with the Minoanisation phenomenon, a focus on ceramic production and consumption patterns enables reconsideration of the active roles of presumably non-elite people, *i.e.*, craftspeople and their consumers, in enabling and promoting culture change in Cycladic settlements.

### Framing a Technological Approach

In order to focus on the local production level and consider island communities as active participants in broader exchange activities, it is important to evaluate the interactions that occurred between Cycladic islanders and other communities as a network of exchanges, of goods, people and information (Broodbank 2000; Broodbank and Kiriatzi 2007; Knappett and Nikolakopoulou 2005; Knappett 2011). A community of practice approach to Minoanisation and Mycenaeanisation offers potential for furthering our understanding of these phenomena, because it provides insight into the role of craftspeople, including potters, as agents of material culture change who introduced new objects, technologies and decorative strategies into existing local traditions; such an approach also highlights evidence for interregional interaction beyond trade by clarifying connections between different craft production traditions. For example, it is likely that long-term, sustained interaction between potters enabled the introduction of new technical acts into local ceramic production practices across a wide geographical

area (Gosselain 2000; Kiriatzi 2003; Roux 2003; Broodbank and Kiriatzi 2007; Hilditch 2008; Jeffra 2013). Few studies have focused explicitly on characterising Cycladic potting communities from a *chaîne opératoire* perspective, *i.e.* an approach that unpacks production traditions or practices into a sequence of technical actions, from clay choice to forming technique to firing strategy,<sup>1</sup> though recent studies with a focus on particular periods in particular settlements have clarified some previously unknown or underemphasised facets of processes of interaction and material culture change (Berg 2007a; 2007b; Hilditch 2008; 2014; Gorogianni *et al.* 2016).

Acknowledging the dynamic nature of interactions that afford transmission of technical and stylistic knowledge, recent archaeological approaches to ceramic technologies and learning processes have drawn on socio-technological approaches within anthropology and sociology, in tandem with increasingly sophisticated archaeometric techniques for determining provenance and technology (*e.g.*, in the Near East and Aegean, see Roux 2003; Boileau 2005; Hilditch 2008; Kiriatzi 2010; Day *et al.* 2011). Concepts such as the *chaîne opératoire* or production sequence (Leroi-Gourhan 1993; Gosselain 2000) and ‘community of practice’ (Lave and Wenger 1991; Wenger 1998) are used to break apart the myriad interactions that constitute production, distribution and consumption activities in the material record (Boileau 2005; Hilditch 2008; 2014; Jeffra 2013; Esposito and Zurbach 2014). These analyses provide information on complex interactions with respect to social, material and technological factors and their shifting nature over time, and enables consideration of interaction at multiple scales of analysis: the micro-scale of the individual producer or potter, the meso-scale of the craft group or potting community, defined through shared practice, and the macro-scale of regions in which multiple craft communities overlap and interact with one another (Hilditch 2008; Knappett 2011). Ceramic production, distribution and consumption do not take place in a vacuum; the social context of craft learning and production, the affordances and constraints of exchange mechanisms and the socially motivated desires of consumers, all of which operate at different scales, impact how material culture changes through time. In this way, production and consumption acts are a window onto the social practices of both the craftsman and consumer and how they mediate their interactions within wider social worlds.

Given that the ceramic production sequence is intrinsically bound up with learned and shared practices on a local level, the introduction of new technologies can provide insight into the types of interactions taking place between potting communities at the production and consumption level. The potter’s wheel has been a major focus of interest in this regard, as it first appears within Cycladic settlements during the MBA and has been studied as part of a package of technological innovations that spread across the

Aegean from Crete (Davis and Lewis 1985; Knappett and Nikolakopoulou 2005; 2008; Berg 2007a; 2007b; Hilditch 2008; Gorogianni *et al.* 2016). The successful adoption of the potter's wheel requires prolonged, intensive contact between master and apprentice for the latter to learn and become competent in the physical gestures necessary for producing a successful ceramic vessel, *i.e.* how the raw material behaves under rotative kinetic energy (RKE). This learning context can be vertical, across generations, or horizontal, between members of different social groups. In the case of relatively rapid geographical spread of a new technology, such as the potter's wheel into the southern Aegean during the second millennium BC, the latter seems most likely. Intensive, sustained contact between two potters from potentially different communities of practice suggests another type of social interaction, in addition to short-term interactions that occur through activities of trade or exchange, taking place across technology transmission networks, and is paralleled in, for example, the transmission of Minoan weaving technology throughout the Cyclades (Davis 1984; Cutler 2012; this volume).

Recent studies have demonstrated that it is not only possible to identify these types of interactions between craftspeople, but to reconstruct their directionality and possibly their duration, too. The work of Kiriatzi on Kythera (2003; 2010; Broodbank and Kiriatzi 2007; Broodbank *et al.* 2005), Jeffra on Crete and Cyprus (2011; 2013), Berg at Phylakopi (2007a; 2007b), Choleva at Lerna (2012) and Spencer in central Greece (2007; 2010), as well as the present authors at Akrotiri (Hilditch 2008; Nikolakopoulou forthcoming<sup>2</sup>) and Ayia Irini (Gorogianni *et al.* 2016; Abell 2014a; 2014b), opens new avenues for considering the specific ways in which cultural interaction between craftspeople can shape the material and social landscape of prehistory, and to evaluate how ceramic production and consumption strategies changed over time within and between Cycladic communities.

### **Communities of Practice in the MBA Cyclades**

Recent analyses focused on communities of practice at Akrotiri and Ayia Irini during the MBA provide case studies for examining Cycladic production and consumption patterns before and after the traditional beginning of the Minoanisation phenomenon in the later MC period.

#### ***Akrotiri in the MBA***

Study of the ceramic assemblage from the pillar pit excavations at Akrotiri has enabled new phasing of the Middle Cycladic period (Table 9.1), facilitating comparison with other Aegean sites (Nikolakopoulou *et al.* 2008), and enabling study of imports and local ceramic technologies

before and during the earliest phase of Minoanisation. Cretan imports of Polychrome and Barbotine Ware, dating to MM IA, have been identified in fragmentary sherds within the earlier MC deposits of Phase A. In Phase B, in which 'the main attributes of the MC period at Akrotiri begin to unfold' (Nikolakopoulou forthcoming, chapter 2), MM II Cretan imports were rare (Nikolakopoulou *et al.* 2008, 317; Knappett forthcoming), providing a stark contrast for the sharp increase in Cretan imports of MM IIB–IIIA during Phase C. There is no evidence for the use of the potter's wheel until Phase C, among ledge-rim bowls and straight-sided cups produced in a local fabric (Knappett and Nikolakopoulou 2005; 2008; Jeffra forthcoming).

Knappett and Nikolakopoulou (2008, 1) addressed the onset or beginnings of Minoanisation at Akrotiri, crediting 'Cretan material culture [as] more a cause than an effect of Minoanisation', with Cretan *objects*, rather than Cretans, acting as 'colonists' (Knappett and Nikolakopoulou 2008, 38). The appearance of the potter's wheel for the production of straight-sided cups and ledge-rim bowls reveals a 'limited local production and imitation of Cretan forms... [which are] fully integrated within local traditions' (Knappett and Nikolakopoulou 2008, 37), an argument confirmed by technological study of ceramics in Phase B and C deposits, which evaluated evidence across the entire *chaîne opératoire* and demonstrated that Phase C wheel-fashioned ledge-rim bowls and straight-sided cups are firmly embedded within local Theran production sequences (Fig. 9.1; Hilditch 2014; forthcoming b). Among these vessels, there was little attempt to refine the local clay paste in imitation of the fine fabrics of contemporary Minoan imports. Instead, these wheel-fashioned (more specifically, wheel-coiled: Jeffra forthcoming) vessels were manufactured using local clays, with low paste processing, just the same as the clay used for the local handmade pots, indicating the same technical decisions and therefore deliberate social choices of clay recipe (Hilditch 2008; forthcoming b).

The appearance of wheel-coiled pots at Akrotiri manufactured using existing local processing practices demonstrates that the local potters at Akrotiri were not simply replaced by their Minoan counterparts; rather, Theran potters had sustained contact with Minoan potters, allowing them to learn the wheel technique, which they then incorporated into their own local traditions. If that interaction took place at Akrotiri, with Minoan potters being resident at Akrotiri, or passing through in an itinerant capacity, it would seem that they did not impose their own manufacturing traditions onto the local potting community, in contrast to the situation on Kythera which was examined by Kiriatzi (2010; see also Broodbank and Kiriatzi 2007). Instead, they were integrated within the existing communities of practice that adopted new Minoan shapes and forming techniques but retained other traditional features of the local *chaîne opératoire*. Potters at Akrotiri chose to produce small handleless vessels

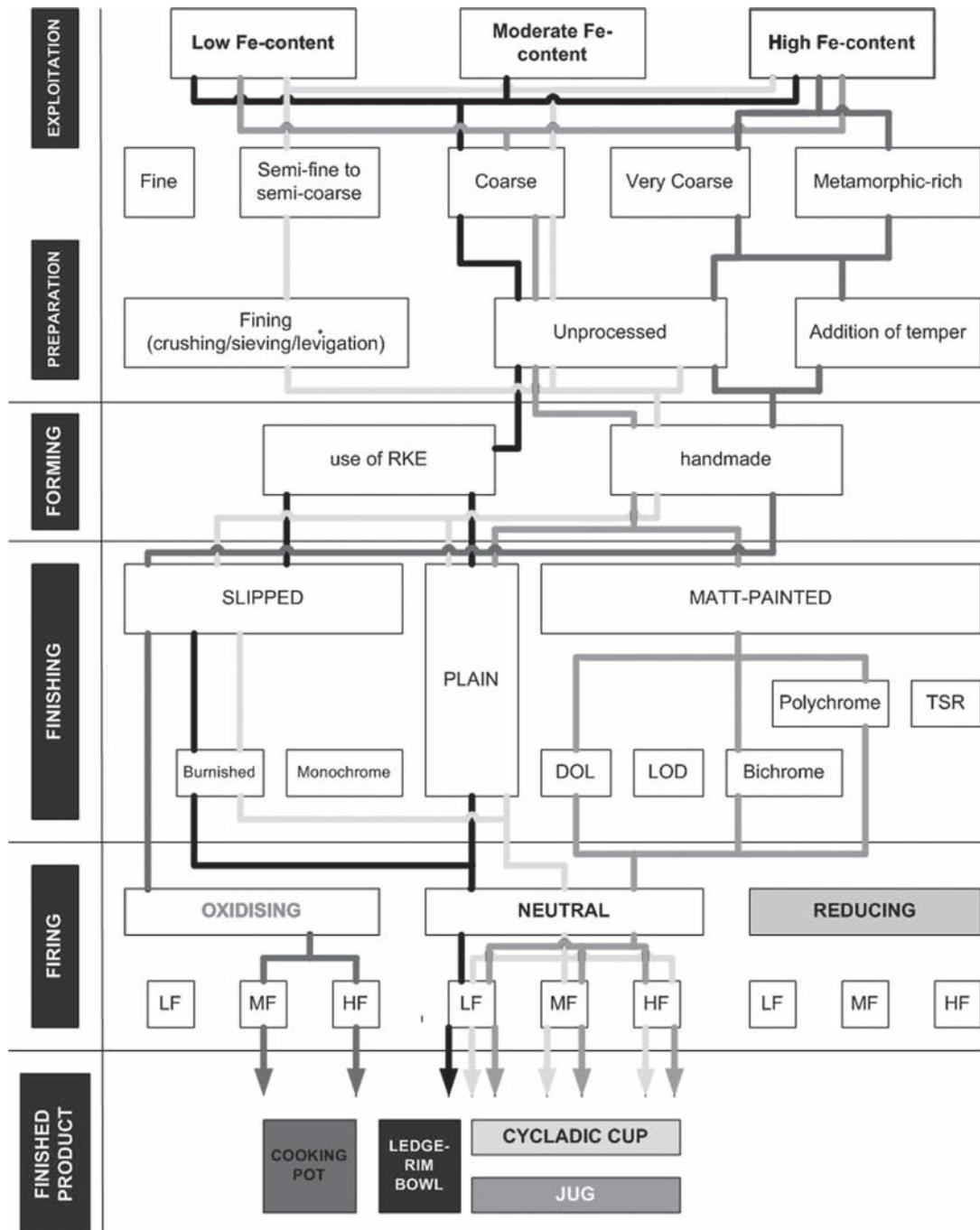


Fig. 9.1. Overview of the *chaînes opératoires* for several Phase C Akrotiri vessels, including the wheel-coiled ledge-rim bowl. (Image: J. R. Hilditch.)

designed for use in Minoan or Minoanising ritual practices using a specifically Minoan technology. Yet, potters do not produce vessels in isolation from the consumers of such vessels: we can also infer that at least some inhabitants of Akrotiri participated in Minoanising drinking and feasting ritual practices. These rituals required specific shapes, such as the conical cup and ledge-rim bowl, and deliberate

formation techniques were used to enhance the intrinsic value of these novel artefacts (Hilditch 2014). It seems that their ‘adoption and distribution is inextricably linked, not only to consumption practices but the choices involved in the production of these vessels’ by non-Cretan communities (Knappett and Hilditch 2015). Technological standardisation within or across multiple stages of the *chaîne opératoire*,

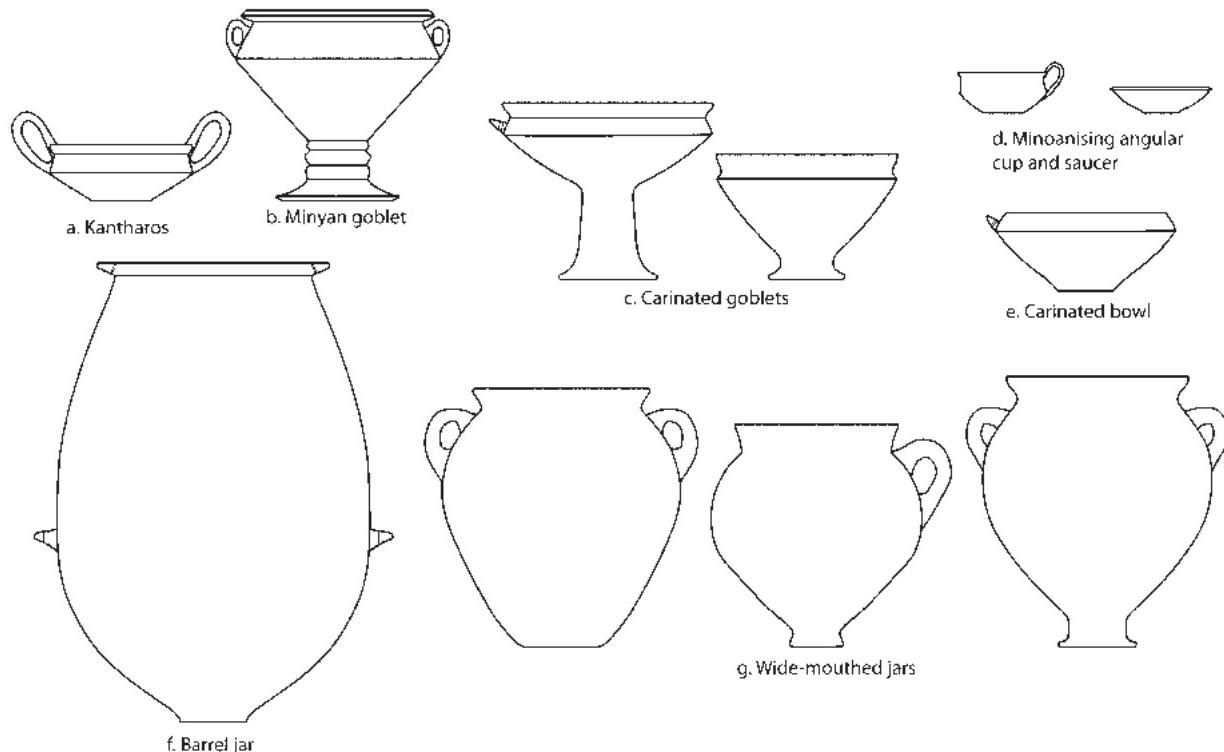


Fig. 9.2. Selected ceramic shapes of Period IV Ayia Irini (drawings not to scale). Profiles after Caskey 1972, nos. D1, D3, D70, D74, D85, D88, D89, D92, D93, D101, D121, D125, D128, E14, E16. (Courtesy of the Department of Classics, University of Cincinnati).

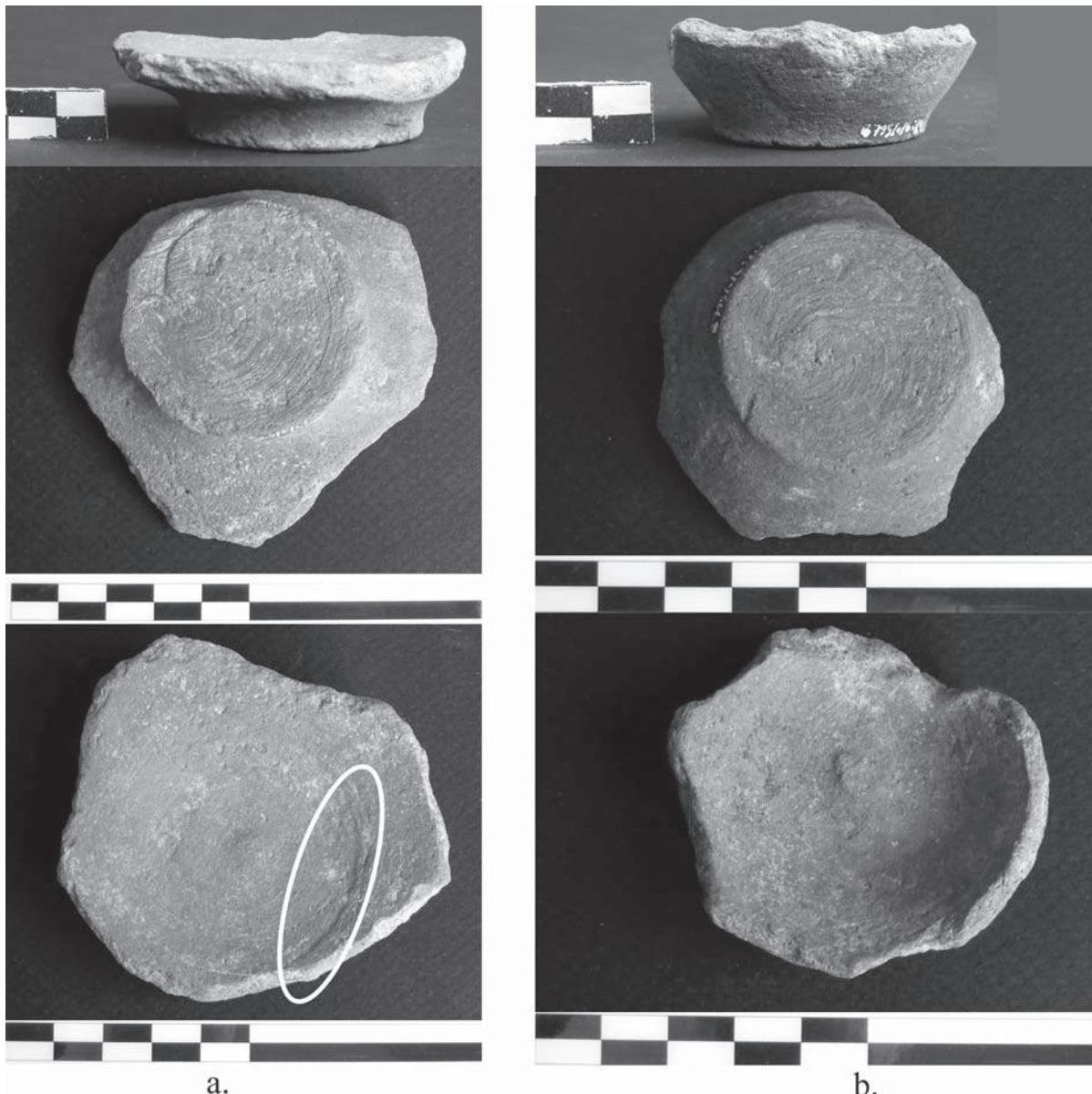
including the traditionally resistant forming technique stage (van der Leeuw 1993; 1994; Gosselain 1998; 2000) which, in this case, requires at least partial use of the potter's wheel, was needed to conform to the ideal of the Minoan object (Knappett and Hilditch 2015). In this way, the assemblages of Akrotiri and Ayia Irini are remarkably similar in character, although the wheel at Ayia Irini was used much earlier than at Akrotiri, in Period IV (Table 9.1).

### Ayia Irini in the MBA

Like Akrotiri, stratified deposits at Ayia Irini enable comparison of patterns of import and local production before and during the Minoanisation phenomenon. In the pre-Minoanised phase of the settlement, Period IV, exchange and production patterns at Ayia Irini differed from those at Akrotiri and Phylakopi. On the one hand, a greater proportion of the assemblage was imported, up to 25% (Overbeck 1982; Abell 2014b, 353–356). Imports from the mainland, especially in the form of Grey Minyan ware, were more common at Ayia Irini than the other Cycladic sites, perhaps not surprising given the geographical proximity of Ayia Irini to the mainland (Nikolakopoulou 2007). However, the most common imported wares in all but the earliest phase of Period IV were 'Minoanising', in Overbeck's terminology (Overbeck 1989; Crego 2007,

337, fig. 4). Recent macroscopic fabric analysis in Area B suggested that much of Overbeck's 'Minoanising' ware may, in fact, be made up of Cretan products (Abell 2014b, 357–359, 364–365). In this respect, Ayia Irini in Period IV also differs from the other major Cycladic sites, where Minoan and Minoanising imports were rare (Hood in Barber 2007; Knappett and Nikolakopoulou 2008). The relative prevalence of Cretan imports in addition to the presence of abundant mainland Minyan imports may suggest that Ayia Irini was better integrated into early long-ranging exchange networks than were Akrotiri and Phylakopi, likely a result of the role of Ayia Irini in providing access to and processing metals from Lavrion (Davis 1979; Abell 2014a).

Technical features of the local repertoire reflect different types of connections with Minyan-producing and Cretan communities of practice. For example, despite the interest of consumers in Minyan ceramics, the most common shapes produced by local potters (Fig. 9.2: c, e–g) were not direct imitations of common Minyan forms, although a preference for carinated, metallicising shapes and burnished surfaces is apparent (Fig. 9.2: c, e; Overbeck 1989). True imitations of Minyan shapes, at a macroscopic level, do not preserve evidence for technical similarities to Minyan-producing communities of practice in clay processing, forming methods using a wheel, or, in most cases, reduction firing (Overbeck 1989; Spencer 2007; 2010; Abell 2014a).



*Fig. 9.3. Wheel-coiled Period IV vessels showing clear spiraliform string marks on bases from removal from the potter's wheel whilst in motion; a coil-join is circled in the lower body of the saucer (a). (Photo: N. Abell).*

Accordingly, although there seems to have been a desire to imitate certain aspects of Minyan production (metallicising shapes, burnishing), there are no clear technical connections that link the potting community of practice on Kea with those of Minyan-producing communities.

The possible exception to this pattern would be the limited use of the potter's wheel at Ayia Irini in Period IV, since only Minyan-producing and Cretan communities of practice utilized wheel technology in the earlier MBA. Wheel-using communities of practice in mainland Greece and Crete developed their use of this technology independently from one another (Knappett 1999). The two regions produced

different shapes, used different firing methods and may even have employed different kinds of equipment, given that physical potter's wheel heads are common on Crete, but very rare<sup>3</sup> in mainland Greece (Rutter 1983, 348–353; Evely 1988; Knappett 1999; Spencer 2007).

The use of the potter's wheel in the earliest phases of the Period IV settlement at Ayia Irini is attested by the presence of small, plain vessels in local fabrics, similar to those in Cretan rather than mainland repertoires (Fig. 9.2: d); rilling and string-cut bases on these vessels are indicative of wheel production (Fig. 9.3; Abell 2014b, 370–372). In addition, a stone wheel head, paralleled on Crete, was found in a Period

IVb context (Overbeck 1989, 147–149, 196, no. 19–2). These features strongly suggest that the potter's wheel was introduced at Ayia Irini through interaction with Cretan rather than mainland communities of practice.

Like the potter's wheel, two other features typical of Cretan communities of practice were first adopted at Ayia Irini in the early phases of Period IV: the warp-weighted loom and cooking methods using tripod vessels (Davis 1984; Overbeck 1989, Deposits P, Q, AO, BD, BX, CE). The presence of three such distinctive Cretan practices within the settlement, which require lengthy periods of apprenticeship to master, suggests that these technologies were adopted at Ayia Irini through the mobility of craftspeople trained in Cretan communities of practice, who engaged in long-term, direct contact with local craftspeople (Abell 2014a). Interaction between not only traders but also Keian and Cretan craftspeople in Period IV, well before the traditional start of the Minoanisation phenomenon in the later MC, likely played a role in shaping how local people viewed Minoan and Minoanising objects and practices in subsequent periods. These idiosyncratic patterns of trade and interaction at Period IV Ayia Irini were likely a factor that encouraged what Broodbank (2004, 62) called the 'cultural promiscuity' of the community in later periods, which seems to have been quite open to using technologies and objects with diverse cultural connections throughout the MBA–LBA, in a manner unlike other Cycladic communities.

Period IV deposits at Ayia Irini that preserved loom weights, tripod vessels and Minoanising wheel-fashioned pots<sup>4</sup> were spatially widespread (Overbeck 1989), which suggests that people using these objects were integrated into the community. On the basis of macroscopic analysis, both wheel- and non-wheel-using potters employed similar clays, processing and firing techniques (Abell 2014b). That is, both wheel- and non-wheel-using potters seem to have become incorporated into a single Keian community of practice, connected to each other through all stages of the *chaîne opératoire* apart from the choice of forming technique. Despite differences in timing, this aspect of the adoption of the potter's wheel at Ayia Irini is paralleled at Akrotiri, where, as discussed above, the wheel seems to have been incorporated into the local community of practice. In addition, like Phase C Akrotiri, the wheel was employed in a limited fashion in its earliest phase of use at Ayia Irini, almost exclusively for the manufacture of rare small, open, Minoanising shapes (less than 2% of vessels reported in Overbeck 1989; see also Abell 2014b, 335, 370–372). At Ayia Irini as at Akrotiri, this pattern of selective use suggests that the technology itself was associated specifically with the production of Minoanising shapes and may have added value to such vessels.

Despite a preference for Minoanising shapes generally, the specific shapes made with the wheel at Ayia Irini and Akrotiri differed slightly. In Period IV, the wheel was used

at Ayia Irini to make small bowls, cups and lamps. By Period V, when ledge-rim bowls were first being produced at Akrotiri, Keian potters had begun to manufacture a variety of shapes using the potter's wheel, the most common of which was the conical cup (Fig. 9.4; Davis 1986; Gorogianni *et al.* 2016). If we return to Barber's (1987, 144) 'locally modified' descriptor for MC pottery, it would be fair to suggest that we *expect* differences, not only in the adoption of new production practices by potters but also the repertoire of vessels consumed by Cycladic settlements. It is perhaps more surprising then that such clear parallels do exist between Ayia Irini and Akrotiri in the earliest adoption of a new forming technique used in a limited capacity to produce specifically Minoanising vessels. Yet, in the LC period, the use and adaptation of wheel technology in the Cyclades reveals further differences in how Cycladic potters and consumers engaged with the Minoanisation phenomenon.

### Ayia Irini, Phylakopi and the Potter's Wheel

A recent study by the authors, in collaboration with E. Gorogianni, has clarified how the adoption and use of the potter's wheel at Ayia Irini changed over the course of the Minoanisation phenomenon (Gorogianni *et al.* 2016). Ina Berg has addressed similar questions at Phylakopi (Berg 2007a; 2007b). These studies enable comparisons in production choices across a full range of locally produced pottery shapes at Ayia Irini and Phylakopi, rather than focusing primarily on the evidence of the conical cups (*e.g.*, Davis and Lewis 1985; Berg 2004), which, because of their quantity, especially in the LC phases of the Minoanisation phenomenon, can obscure variability in other aspects of local production.

### Ayia Irini

At Ayia Irini, Gorogianni *et al.* (2016) examined vessels from Period V–VII deposits across the site for evidence of hand- and wheel-forming methods visible through surface macrotraces. The use of the potter's wheel became common in Period V, at a time contemporary with the first use of the wheel at Akrotiri (above) and at Phylakopi (Berg 2007a; 2007b). Although the increased use of the wheel was noted previously (Davis 1984; Davis and Lewis 1985), by examining a full range of locally produced shapes, Gorogianni *et al.* (2016) demonstrated that while the wheel increased in popularity from Period V–VII, there was a great deal of variability in the kinds of shapes manufactured with this technology over time (Fig. 9.4). Despite the fact that Minoanising shapes were more likely to be made with a wheel in Period V than non-Minoanising ones, that distinction broke down during Periods VI and VII, particularly among open vessels, which were increasingly

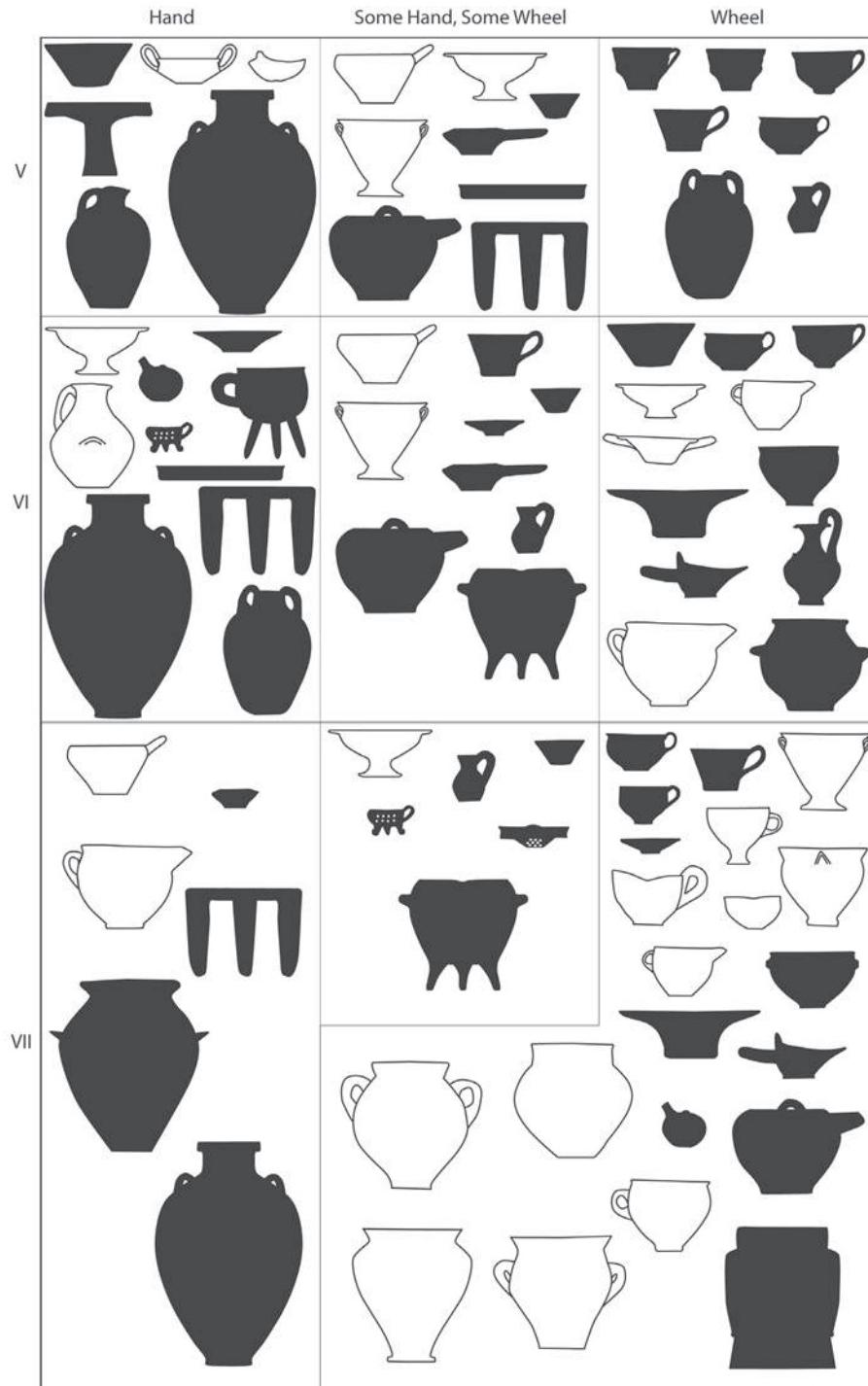


Fig. 9.4. Schematic of changes in the use of the wheel for different shapes at Ayia Irini on the basis of the analysis of Gorogianni *et al.* 2016. Filled shapes are Minoanising; outlined shapes are non-Minoanising.

likely to be wheel-fashioned in later periods. By Period VII the vast majority of open vessels, Minoanising or not, were made using a wheel.

Despite these trends, they were not universal within the assemblage, even for conical cups, the most abundant

and standardised shape of Periods VI and VII, which were usually but not universally wheel-coiled (Fig. 9.4; Gorogianni *et al.* 2016). That is, there was neither an inflexible nor rigid association between forming techniques and shapes produced with them. This pattern demonstrates

that potters operating at Ayia Irini made different choices along the *chaîne opératoire* about how to make particular shapes, even in Periods VI and VII, the height of the Minoanisation phenomenon. Macroscopic observations of fabrics and firing habits across the entire local assemblage suggest that both wheel- and non-wheel-using potters were integrated into the local community of practice in aspects of the *chaîne opératoire* other than forming techniques, as they had been previously. Whether or not Cretan potters or potters trained in other Aegean wheel-using communities of practice may have arrived at Ayia Irini in Period V or later, there is no evidence that they imposed their techniques on local potters, took over the potting industry, or were solely responsible for the local production of Minoanising ceramics.

Not only did local potters employ diverse techniques, they also produced a wide variety of shapes throughout the period of Minoanisation. As Minoanising shapes became popular, non-Minoanising shapes continued to be produced (Fig. 9.4). Several of the most popular drinking shapes that were locally produced during Periods V–VI were non-Minoanising Cycladic cups and goblets, despite clear interest also in conical cups (Cummer and Schofield 1984; Davis 1986; Gorogianni 2008; Schofield 2011; Abell 2014b). While the presence of many conical cups attests to production and consumption choices that reflect participation in Minoanising ritual practices, as at Akrotiri, the ongoing manufacture of non-Minoanising shapes also suggests that local potters and consumers continued to make choices that distinguished them from Cretan ones, and indeed, other Cycladic ones, who, for example, apparently did not manufacture goblets in LC I–II (Marthari 1987; Davis and Cherry 2007; Mountjoy 2007; Nikolakopoulou 2007).<sup>5</sup> In combination with the evidence for continued production and consumption of non-Minoanising shapes, our analysis demonstrates that at least some ceramic producers and, indeed, consumers, continued to adapt and even reject certain Minoanising ways of doing things, at the same time that Minoanising objects, practices and technologies became widespread within and beyond the community.

### *Phylakopi*

Did Melian potters make similar choices as Keian and Thera ones as to what to adopt, when to adopt it and how to adapt new practices/technologies within their existing *chaîne opératoire*? Despite chronological uncertainties at Phylakopi, the mature phases of the Second City mainly correspond to Phase B and C deposits at Akrotiri and late Period IV and V deposits at Ayia Irini (Table 9.1). The publication of the 1974–77 excavations only mentions use of the potter's wheel in cursory fashion for the MC ceramic assemblage, where Barber comments that evidence of this technique is rare, 'with the exception of a few late MC

cups... though most of the smaller, finer vessels are well and regularly shaped and were probably so manufactured' (Barber 2007, 186, with reference to Atkinson *et al.* 1904, 108).<sup>6</sup> Berg's (2007a; 2007b) study of the MC–LC II ceramic assemblage at Phylakopi revealed that only small open vessels such as conical cups, bell cups, straight-sided cups and saucers show macroscopic traces of wheel use in the later MC (2007b, 242).<sup>7</sup> That similar shapes were also the earliest products of wheel-use at both Akrotiri and Ayia Irini suggests a consistent pattern with regards to the *initial* adoption of the potter's wheel, despite differences in timing as noted above. The choice to use this technique only in the production of small handleless cups and open shapes of Minoan type suggests that potters in all three communities recognized a conceptual connection between their own use of the wheel and Cretan wheel production, especially in the earliest phases of its use (Berg 2007, 82–85; Knappett and Nikolakopoulou 2005). In later phases at Phylakopi, Berg (2007a; 2007b) reported an ongoing close association between the use of the wheel for Minoanising shapes and hand-building methods for non-Minoanising shapes, in contrast to the more fluid association between forming technique and shape that Gorogianni *et al.* (2016) revealed at Ayia Irini. Thus, despite broad similarities in the initial use of the wheel, differences in the timing and character of the adoption of the Minoanising potter's wheel at these sites highlights the importance of local production choices, as well as the needs and expectations of consumers, in shaping the ways in which Minoanisation processes operated in different island communities.

### Technological Approaches to Minoanisation vs. Mycenaeanisation

The adoption and changing use of the Minoanising potter's wheel in the Cyclades provides a case study not just for examining broad-ranging processes of material culture change, but also for evaluating the local modifications through which those processes operated. Because the potter's wheel can be closely tied with Crete and Cretan methods of production, the use of this technology in previously 'non-Minoanised' Cycladic communities of practice has been part-and-parcel of efforts to understand better the interactions taking place during the onset of Minoanisation, with respect to the appearance of 'iconic' conical cups, as well as across full assemblages (Wiener 1984; Davis 1984; Davis and Lewis 1985; Berg 2004; 2007a; 2007b; Knappett and Nikolakopoulou 2005; 2008; Knappett and Hilditch 2015; Gorogianni *et al.* 2016). Such perspectives, which integrate changing patterns of material culture with robust models for the movement of people and technologies within widening interaction networks, have not yet, however, been utilized extensively to elucidate how

culture change in the Cyclades might have been impacted by shifting patterns of interaction with mainland Mycenaeans, either in the peak of Mycenaean influence in the Cyclades (LC III), or in previous periods, which overlap the late phases of the Minoanisation phenomenon (LC I-II). As with Minoanisation, it is important to elucidate what changed and when with respect to mainland-Cycladic interactions, both before and during the process of Mycenaeanisation, in order to better understand what factors may have led to the changes in the Cyclades during the Mycenaean palatial period of LC III. In ceramic terms, the major feature of Mycenaeanisation during early LC III (LHIIIA1: see Table 9.1) at both Phylakopi and Ayia Irini is the complete cessation of local production of fine, decorated wares, which were instead imported almost entirely from the mainland (Morris and Jones 1998; Mountjoy 2007; 2008). Accordingly, a focus on how Cycladic potting communities responded to new patterns of exchange and interaction of LC II, following the eruption of the Thera volcano and during the latest ‘pre-palatial’ phase of Mycenaean society, is as important for considering the dramatic shift in LC III potting practice in those communities as evaluating potting practices in the Cyclades before and during the earliest phases of Minoanisation.

### **Late Minoanisation = Early Mycenaeanisation?**

Although Akrotiri disappeared in the late 17th century BC, the eruption of Thera itself is a useful starting place for considering the reconfiguration of relationships between the Cyclades and mainland in the LBA. Mountjoy and Ponting’s (2000) discussion of LM IB/LH IIA imports at Phylakopi and Ayia Irini, potentially the early phase of Mycenaeanisation in the Cyclades, emphasizes the shift in trade networks after the Thera eruption and the development of new exchange connections between the Cyclades and the mainland. These connections ‘materialise’ in the increasing quantities of LH IIA imports found in LC II assemblages, contrary to the traditional view that most were LM IB imports from Crete (Furumark 1950). However, imported wares provide only one side of the equation; in order to elucidate the type of connections between Cycladic and mainland communities, as have been investigated between Crete and the Cyclades, it is also desirable to evaluate if, and how, interaction with early Mycenaeans may have impacted production and consumption practices in the Cyclades across the entire LC II ceramic assemblage.

In contrast to the widely explored EC period and slightly less well-known MC to early LC period, very little technological analysis of LC II–III pottery from the Cyclades has been carried out (Hilditch forthcoming a). Our relatively poor understanding of local ceramic production in these later periods and their continuity with earlier production practices

in the Cyclades, can be explained by a combination of lack of excavation and publication of sites of this era (Mountjoy 2008, 469) and a scholarly focus towards finer decorated pottery, as these wares have held the greatest potential for establishing chronological sequences and contacts for trade or exchange (Furumark 1950; Rutter 2001a, 137 with references; 2001b; Sherratt 2011). The destruction of Akrotiri also reduces the comparative potential for diachronic studies at the three largest Cycladic sites. Stratified deposits of LC II from Ayia Irini, however, provide an excellent case study for considering the relationship between Mycenaean imports and local Cycladic production during the early phase of Mycenaean influence in the Cyclades (Cummer and Schofield 1984; Schofield 2011).

### **LC II at Ayia Irini**

Mainland practices and ideas impacted Ayia Irini before, during, and after the Minoanisation phenomenon. Residents of Ayia Irini had a long history of interaction with the mainland (above). Even as Minoan influence grew, the importation of mainland and Aeginetan ceramics continued (Cummer and Schofield 1984; Davis 1986; Schofield 2011; Gorogianni and Abell forthcoming). The presence of boars’ tusks from helmets, sword pommels and an engraving of a Mycenaean warrior, as well as the depiction of horses, chariots, and hunters in the miniature fresco from the Northeast Bastion, may reveal cultural and/or ideological connections with the mainland throughout Periods VI and VII (Cummer and Schofield 1984; Morgan 1998, 204–205; Schofield 2011).<sup>8</sup> On the other hand, the degree to which military equipment may be associated with Mycenaean as opposed to Cretan ideology is a problematic issue (Molloy 2012).

The mainland and Mycenaean connections of LC II Ayia Irini are most apparent in the realm of imported pottery. When all local and imported wares from published deposits are considered together, it is noteworthy that although conical cups were the most common drinking shape, Mycenaean rounded goblets (painted and plain) were the next most common (Fig. 9.5; Cummer and Schofield 1984; Schofield 2011; Abell 2014b, 522, table 55). Abundant imported Mycenaean tableware at Ayia Irini suggest that some residents participated in drinking practices that had at least superficial similarities to those that existed on Aegina and in the mainland, despite continued participation also in Minoanising practices that used conical cups.

In terms of production, however, although imported Mycenaean ceramics were plentiful, Keian potters did not imitate common Mycenaean shapes, notably rounded goblets and alabaster, nor the variety of new decorative motifs of LH II (or, for that matter, LM IB).<sup>9</sup> The absence of Mycenaean shapes in the local Keian repertoire, however, does not reflect a wholesale lack of mainland connections



Fig. 9.5. Imported Mycenaean goblet from Ayia Irini, which was mended in antiquity with a lead clamp. (Courtesy of the Department of Classics, University of Cincinnati).

in locally produced pottery – even in Period VII, local potters imitated goblets with closer connections to Minyan than Mycenaean profiles, as well as mainland type cooking vessels (e.g., Cummer and Schofield 1984, nos. 425, 1645; Abell 2014b, no. 156). This omission in the local repertoire is surprising, since in previous periods, all common imported shapes were also locally produced by Keian potters, who also showed a great deal of flexibility and openness in the application of Minoanising wheel technology over time (Cummer and Schofield 1984; Davis 1986; Overbeck 1989; Schofield 2011).

Examination of manufacture characteristics of imported Mycenaean pottery in Period VII deposits in Area B suggests that the majority of Mycenaean vessels found there were probably wheel-thrown; most Mycenaean imports were also very well-made, with regular walls and well-smoothed surfaces (Fig. 9.5; Abell 2014b).<sup>10</sup> In contrast, Gorogianni *et al.* (2016) suggest that wheel-coiling rather than wheel-throwing had become the dominant forming method used locally during Period VI and VII, while Keian potters did not smooth vessel surfaces in a manner like that of early Mycenaean potters. That is, in addition to failing to produce imitations of Mycenaean ceramics, local potters made no conspicuous attempt to insert technological markers of Mycenaean pottery production into the local community of practice, whether because such markers were not valued, or because the organization or make-up of communities of practice in the two regions did not encourage interaction or communication. This pattern of local *production* at Ayia Irini stands in contrast to *consumption* patterns within the community that demonstrate that local residents valued Mycenaean vessels – painted and plain, open and closed.

This feature of Mycenaean-Keian interaction (or lack thereof) suggests that the mechanisms through which the process of Mycenaeanisation operated may have differed

quite dramatically from those that enabled Minoanisation, at least at Ayia Irini. Craftspeople seem to have played a major role in normalising Minoan material culture by producing Minoanising objects using Minoanising technologies over a very long period of time. The fact that some Aegean craftspeople utilizing Minoanising technologies were probably mobile during the MC–LC periods (above)<sup>11</sup> suggests that direct interaction between Cretans and Cycladic islanders, and between ‘Minoanised’ islanders from different communities may also have played a role in the widespread adoption of Cretan ways of doing things from MC–LC II. There is little evidence from the Cyclades to suggest a similar pattern of mobility and interaction between Cycladic and Mycenaean craftspeople, even in LC I–II, although to address this line of thinking more fully, we need to know more about how early Mycenaean potting communities were organized, how they interacted with potters of other mainland ceramic traditions, as well as Cycladic ones and how these things changed over time. Recent and ongoing studies of Mycenaean ceramic assemblages from a technological perspective have begun to address such questions. Building on the application of early elemental composition techniques which focused particularly on fine decorated wares (Catling 1961; Catling *et al.* 1963; see also Perlman and Asaro 1969), recent studies have focused in particular on cooking wares, drinking cups and other plain pottery wares in stratigraphic association with painted wares, although most concentrate on the ‘palatial’ period of LH III (Galaty 1999; 2007; 2010; Hrubý 2006; 2010; 2013; Lis 2008).

## Conclusions

When considering adoption and adaptation of new practices within pottery production, there are four questions that need to be addressed: what was adopted and when, how were new practices adapted and how do production practices relate to consumption patterns within each community? Analysis of production patterns at Akrotiri and Ayia Irini before and after the beginning of the Minoanisation phenomenon suggests that the Minoanising technology of the potter’s wheel, although likely initially adopted as a result of direct, sustained interaction between Cycladic and Cretan craftspeople, was firmly embedded in the local production sequence of each community, a pattern that strongly suggests that the producers of Minoanising ceramics in the Cyclades learned their crafts in Cycladic communities of practice. Although the wheel was adopted earlier at Ayia Irini than at Akrotiri and Phylakopi, analysis of the kinds of shapes typically made with the wheel at all three sites suggests that potters recognized a conceptual connection between their own use of the wheel and Cretan wheel-made production, even though each Cycladic community

employed Minoan technology in its own ways. Notably, Phylakopi, the only settlement for which Whitelaw (2005) argued for a rejection of Minoanisation as an elite status strategy, is also the community in which potters observed the clearest delineation in the use of the potter's wheel for the production of specifically Minoanising shapes even in late phases of the phenomenon, suggesting that the distinction between 'Minoanising' and 'Cycladic' objects and practices may have continued to be particularly apparent or significant to people there. At Ayia Irini, on the other hand, both production and consumption patterns suggest a different kind of engagement with Minoan and Minoanising culture over time, including early evidence for trade with Crete and the adoption of Minoanising technologies in a limited fashion before Minoanisation of the assemblage at large, fluidity in the kinds of ceramic shapes produced and the technologies used to do so over time, and consumption patterns that continued to incorporate the use of a variety of non-Minoanising ceramics, even as Minoanising shapes (and presumably, consumption events) became popular. These small differences in local Cycladic responses to the ceramic aspect of the Minoanisation phenomenon reinforce a growing awareness that Minoanisation can be conceived as a cultural process, a shifting social engagement with Cretan culture that materialises both in the production and consumption of Minoan and Minoanising material culture over time. Moreover, these studies have demonstrated that the Cyclades, like Crete, were not a homogenous whole, and to understand the broader social dynamics over time, it is necessary to evaluate Cycladic production and consumption patterns on their own terms.

Our data for evaluating the mechanisms through which Cycladic material culture changed in response to new patterns of interaction with the emergent Mycenaean culture in the LBA are less robust, although, from a ceramic perspective, Mycenaeanisation appears broadly to manifest itself at the consumption level, with vast quantities of fine pottery from a relatively narrow range of mainland(?) production centres finding their way into the assemblages of Cycladic communities in the LBA. At the only site with large, published, LC II deposits, Ayia Irini, there is no evidence for interaction between Keian and Mycenaean pottery producing communities of practice, nor for 'emulation' of Mycenaean ceramics by local potters, despite the fact that the quantity and distribution of Mycenaean ceramics within the community suggests that such objects had value for local people. Therefore, it seems likely that, although Keian craftspeople had played an important role in promoting and enabling the consumption of Minoanising objects during the previous centuries, economic or social differences in the organization of craft production and the mobility and interaction of craftspeople in LC II and III played a role in the dramatically different character of the Mycenaeanisation of Cycladic ceramic

assemblages in comparison to Minoanised ones. Doubtless, different production and exchange strategies on the part of Mycenaean palaces in comparison to Minoan ones impacted the kinds of products available for Cycladic consumers, and the economic viability of local ceramic production. Nevertheless, local Cycladic ceramic producers continued to manufacture pots, suggesting that, as with Minoanisation, detailed analysis of local and imported wares from holistic, technological perspectives and across entire Cycladic assemblages may, in the future, provide additional insights into the ways in which local craftspeople adopted, adapted, or rejected Mycenaean ways of doing things.

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### Notes

- 1 For one of the earliest studies considering technical choices, though not explicitly using a *chaîne opératoire* approach, see the study of Cycladic White ware by Vaughan, Kilikoglou and Papagiannopoulou (1995).
- 2 This publication of all MBA ceramic deposits from the Pillar Pit excavations at Akrotiri will contain chapters on fabric analysis (Hilditch) and forming technique (Jeffra).
- 3 The few physical potter's wheels found in the mainland have been argued to be evidence for the presence of Cretan potters (Evely 1988; Gauss 2006).
- 4 There is no evidence for where wheel-fashioned pots may have been made within the settlement.
- 5 Nikolakopoulou (2007) does not report any local production of goblets at Akrotiri in MC deposits; goblets also seem to have been a less popular local shape at Phylakopi than Ayia Irini in the MC (Barber 2007; 2008).
- 6 This is understandable, given Barber's (2007) contribution was finalized twenty years before final publication of the volume. Current study of unpublished excavation deposits from Phylakopi in the National Museum in Athens, directed

- by Barber, includes further investigation into wheel-use (Berg) and ceramic fabrics (Hilditch) in late MC wares.
- 7 Berg (2007b, 242) acknowledges that the wheel-made category of this study may contain both wheel-coiled and wheel-thrown vessels, given the ambiguity of macrotraces in fragmentary sherd material.
  - 8 Although the date of the warrior in LH II or III is unclear (Caskey 1966, 375), the boars' tusks and pommels are securely dated in Period VI and VII (Cummer and Schofield 1984, 52, 58, 82, 95, 116; Schofield 2011, 60, 65, 74, 75, 125, 128, 176).
  - 9 Of course Minoanising shapes of the Mycenaean repertoire continued to be made locally at Ayia Irini, but there is no *a priori* reason to connect the production of those shapes with the mainland rather than Crete.
  - 10 Analysis of manufacturing characteristics of imported pottery from other areas of the site is underway in collaboration with Gorogianni.
  - 11 For mobile female weavers in the Cyclades, see Cutler 2012; Gorogianni, Cutler and Fitzsimons 2015. For evidence of other non-local craftspeople at Ayia Irini, see Abell 2014b, 555–560.

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## FASHIONING IDENTITY: WEAVING TECHNOLOGY, DRESS AND CULTURAL CHANGE IN THE MIDDLE AND LATE BRONZE AGE SOUTHERN AEGEAN

*Joanne Cutler*

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### Introduction

The early Late Bronze Age material record at sites across the southern Aegean shows strong evidence of Cretan influence. This influence has generally been discussed in terms of the ‘Minoanisation’ of southern Aegean communities, but the processes by which aspects of Cretan material culture were spread and adopted, and the degree to which this phenomenon should be interpreted as indicative of political and/or economic control from Crete, or alternatively as representative of the acculturation of local populations, has been widely debated (for the ‘Minoanising’ phenomenon see Hägg and Marinatos 1984; Broodbank 2004; Davis 2008; Macdonald *et al.* 2009).

For the most part, the established interpretative models for ‘Minoanisation’ have masked the diversity evident in the material record, and have furthermore tended to convey the impression that the inhabitants of the southern Aegean played a passive role in their interactions with Crete. Recently, agent-active approaches, examining the choices made by both producers and consumers, have been applied to the study of changes in material culture associated with ‘Minoanisation’. This has enabled the development of new interpretations regarding the social and economic strategies employed by various communities, and groups within communities, across the southern Aegean in the Middle and early Late Bronze Age (see Whitelaw 2005; Knappett and Nikolakopoulou 2005; 2008; Berg 2007; Broodbank and Kiriatzi 2007; Davis and Gorogianni 2008; Hilditch 2008; Momigliano 2009; Cutler 2011; forthcoming).

This paper discusses the insights that have been gained from applying such an approach to the study of the adoption and use of Cretan weaving technology in southern Aegean settlements during this period (contemporary with the

MM–LM I period on Crete). Among the various elements of Cretan-style material culture evident in the southern Aegean by the mid-second millennium BC are discoid loom weights. The presence of the discoid loom weights is indicative of the use of the vertical warp-weighted loom. On this type of loom, weights are used to apply tension to the warp threads, which are attached to the upper beam of the loom (Fig. 10.1; for discoid loom weights, see Fig. 10.3). On Crete, the warp-weighted loom was already in use in the Neolithic period, and discoid loom weights were present from EM II (Barber 1991, 100 and Carington Smith 1992, 675 for Neolithic loom weights at Knossos; Warren 1972, 212, 220–222 for discoid loom weights at EM II Myrtos Fournou Korifi). At most of the southern Aegean sites, discoid loom weights are the earliest loom weights of any type to be recovered, and in the majority of cases their presence therefore appears to represent the adoption of the warp-weighted loom itself.

In the following, the uptake of this new weaving technology is considered in light of how technical skills are learned, and the implications of this with regard to the acquisition of exogenous textile craft knowledge are examined. Apparent differences in the scale of use of Cretan weaving technology at different southern Aegean sites, suggesting that not every community engaged with the introduced technology to the same extent, are discussed. The types of textiles that could have been made with the Cretan-style discoid loom weights are then considered within the context of associated questions of dress, presentation of self, and identity, in order to explore possible motivations for the adoption of the new loom type, and are compared with the range of textiles that could have been made on the warp-weighted loom in Crete.

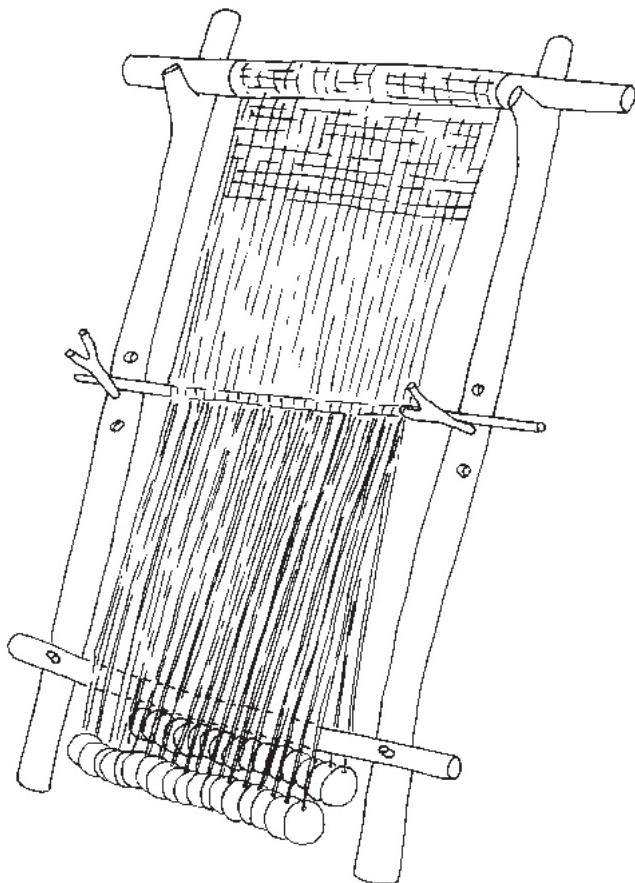


Fig. 10.1. The warp-weighted loom. (Drawing: Annika Jeppsson  
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Finally, some preliminary observations are put forward with regard to weaving technology and dress in the later Bronze Age (LB II–III) period, when the marked Cretan influence on the material culture of the southern Aegean settlements was replaced by a strong mainland influence. The evidence for weaving in this ‘Mycenaeanising’ period is compared with the Middle/early Late Bronze Age evidence, to investigate potential similarities and/or differences in some of the processes associated with ‘Minoanisation’ and ‘Mycenaeanisation’.

### The Middle and Early Late Bronze Age

#### *The Adoption of Cretan Weaving Technology in the Southern Aegean*

Cretan-style discoid loom weights, which often have a flattened or a grooved top, have been found at a number of southern Aegean island sites, including the Cycladic settlements of Ayia Irini on Kea, Phylakopi on Melos,

Akrotiri on Thera and Mikre Vigla on Naxos, as well as Kolonna on Aegina and the islands of Kythera and Antikythera further to the west. In the southeast Aegean they are known from the Serraglio on Kos, at sites on Rhodes (mainly in the area of Ialyssos), the Vathy Cave on Kalymnos, the Heraion on Samos, Emporio on Chios, and Karpathos. Along the southwest Anatolian coast, discoid weights have been recovered from Miletus, Iasos, Teichoussa, Çeşme-Bağlararası, and Liman Tepe, as well as Bakla Tepe on the Cumaovasi Plain. Further to the north they were present at Mikro Vouni on Samothrace and Koukonisi on Lemnos (for an overview of the evidence, with references for individual sites, see Cutler 2012).

On the southern Greek mainland, cylindrical shaped loom weights were in use in the Early Bronze Age (EBA), but disappeared at the end of this period (Carington Smith 1992, 689). A few Cretan-style discoid weights were recovered from early Middle Bronze Age (MBA) contexts at Lerna (Banks 1967, 565–566), but at present there is no other secure evidence for loom weights of any type on the mainland of southern Greece until LH II–III (Carington Smith 1992, 687–689).

The warp-weighted loom was in use at a number of southeast Aegean EBA sites. Flattened ovoid weights and/or flattened rounded weights were present in EBA contexts at Emporio on Chios (Hood *et al.* 1981–82, 632–633, pl. 132), the Heraion on Samos (Isler 1973, 174; Miločić 1961, 29, fig. 37.22), Thermi on Lesbos (Lamb 1936, 163, 158, fig. 44) and Çeşme-Bağlararası (Şahoglu 2009), as well as further to the north at Troy (where many examples are pierced through the wider axis, with those pieced through the short axis being in the minority: Blegen *et al.* 1950, 338, figs. 221, 369; Becks and Guzowska 2004, 103) and at the inland site of Aphrodisias, situated in the Maeander valley (Kadish 1971, esp. 135, pl. 29, fig. 32; Joukowsky 1986, 379–380). While the warp-weighted loom – and flattened ovoid loom weights, among other types – continued in use at Troy (Blegen *et al.* 1951, 115–116), loom weights were not recovered from pure MBA contexts at Aphrodisias (Joukowsky 1986, 379–380: although very few MBA levels were excavated). Similarly, there is no evidence for the continued use of the warp-weighted loom at Emporio on Chios, where the settlement does not appear to have been reoccupied until the later MBA or early LBA (Hood *et al.* 1981–82, 632; Girella and Pavuk this volume; most of the levels dug were EBA in date and few loom weights were found in any period). No loom weight types other than the Cretan-style are published from the Heraion site on Samos, but publication of the loom weights in general has been extremely limited and, as at the other sites, few MBA contexts were excavated. It is therefore currently unclear whether the absence of indigenous MBA loom weights in the southeast Aegean represents a real lack, or whether it is just the result of very limited excavation. Flattened ovoid,

and flattened pyramidal weights were in use at Tarsus during the MBA (Goldman 1956, 323, fig. 441); this site is much further to the east, in south central Anatolia, however.

Before the introduction (or reintroduction, in some cases) of warp-weighted loom technology it is likely that another form of loom was in use at the various southern Aegean settlements, such as the horizontal ground loom. It has been suggested, for example, that the presence of longitudinally pierced spools in MBA contexts at sites on the Greek mainland, as well as at the island sites of Kolonna, Ayia Irini and Phylakopi, may be associated with the warping of this type of loom, although this identification is not certain (Carter Smith 1975, 404–410; Davis 1984, 163; Pavúk 2012; Cutler 2011; 2012). If the pierced spools do represent the use of another loom technology, their relative absence in early Late Bronze Age contexts at Ayia Irini and Phylakopi suggests that the warp-weighted loom had replaced this alternative technology by this period (Davis 1984; Cherry and Davis 2007, 403).

### **The Transmission of Textile Craft Knowledge and Techniques**

Technological practices are socially constituted, and are performed, learned and transmitted in particular social environments (Lemonnier 1993; Hoffman and Dobres 1999; Dobres 2000). The learning of new technical practices or the revision of established ones necessitates not only the replacement or alteration of existing technical operational sequences, but also the negotiation of the world views and social identities bound up with them (for the range of cultural factors influencing the technical choices a craftsperson makes, see Lechtmann 1984; Dilley 1987; Messick 1987; Hoffman and Dobres 1999, 215, 225–226; Dobres 2000, 149–152). Techniques reliant on motor skills are the most resistant to change, since the associated sequence of actions becomes internalised and automatic through long-term practice (Gosselain 2000; Minar 2001). With regard to weaving, different methods are used to warp warp-weighted, vertical two-beam and horizontal ground looms (the three main loom types in use in the eastern Mediterranean during the Bronze Age), and the body movements used when weaving on the warp-weighted loom are different to those used when weaving on the vertical two-beam or horizontal ground loom (Cutler 2011; 2012). In order for new practices to be understood and accepted, the socio-cultural environment must be receptive to new ideas, and opportunity and necessity are also vital factors (van der Leeuw and Torrence 1989; Rogers 2003). Davis has pointed out that an innovation is often adopted only “when its advantages very clearly make it worth forsaking the security of the *status quo* for the uncertainty of experimentation” (Davis 1984, 159–160); the perceived advantages might be economic and/or social in nature. Exposure to the innovation

over a prolonged period of time also makes the prospect of change more readily entertained (Spratt 1989).

Both the learning and practice of craft skills take place within what Lave and Wenger have termed ‘communities of practice’: groups of people who share the same ways of doing things (Lave and Wenger 1991; Wenger 1998). Novices learn to become full participants in a given community of practice through the process of ‘legitimate peripheral participation’, with individuals moving from peripheral to full participation through engagement in practice (Lave and Wenger 1991; Wenger 1998, 4). Through this ongoing engagement in practice and through the production of objects that simultaneously reflect and shape social experience, the community itself is produced, reproduced, and potentially transformed (Lave and Wenger 1991, 56–58; Wenger 1998, 51–71).

Individuals master craft knowledge and skills through the execution of progressively more difficult stages of the production sequence (which require learning increasingly more difficult cognitive and motor-sensory skills), only moving on to the next stage once the previous stage has been mastered (Bril 2002, 142; Roux and Bril 2002, 238). This process requires a prolonged period of contact between the novice and a more experienced craftsperson, with the latter assisting the learner as necessary until he or she has attained full mastery of the craft (Minar and Crown 2001; Tehrani and Reide 2008; for the sustained interaction between novice and more skilled craftsperson in the acquisition of weaving skills, see Maynard and Greenfield 2005; Hendon 2006; Tehrani and Collard 2009). Technical expertise in complex crafts such as the use of the potter’s wheel and weaving takes years to achieve (for making vessels on the wheel, Roux and Corbetta 1989; Roux and Bril 2002; Abell and Hilditch this volume; for weaving, see Dilley 1989, 187; Hendon 2006; Tehrani and Reide 2008, 321).

In pre-industrial societies, technical knowledge and know-how are most frequently acquired via vertical transmission from one generation to the next within the same family, with children often beginning to learn the body techniques and skills associated with a particular craft at a very young age (with regard to weaving, see Aronson 1989, 15; Maynard *et al.* 1999, 386–387). Learning a new technology, such as weaving on the warp-weighted loom, not previously practised within a community, requires the horizontal transmission of technical skills between members of the same generation from different communities (for vertical and horizontal transmission, see Hosfeld 2009, 46). Although the length of time required to become proficient in weaving on the warp-weighted loom is likely to have been reduced if the individuals learning the new skill were already competent in weaving on another type of loom, the need for sustained contact between novice and experienced artisan suggests that either individuals travelled away from their communities and spent a significant length of

time elsewhere in order to learn the new techniques, or that weavers skilled in the use of the warp-weighted loom spent a significant length of time as visitors or immigrants in these communities.

The archaeological indicators of this new technological practice, the loom weights themselves, are objects that are not generally perceived as having any intrinsic value (although they are of significant value to the weavers who use them) and could also be produced locally with relative ease; they are therefore unlikely to have been traded, and thus would very rarely travel from one location to another except with their owners (Barber 1991, 299). An initial macroscopic examination of the more than 1,200 Bronze Age loom weights from Ayia Irini, Kea and the c. 210 loom weights from Miletus has indicated that 15 percent or more are manufactured from non-local ceramic fabrics (Cutler 2011; 2012; forthcoming; for a discussion of the non-local loom weights from the Northern Sector at Ayia Irini, see also Gorogianni, Cutler and Fitzsimons 2015).<sup>1</sup> These include a wide range of fabrics, some of which are consistent with Cretan clays, while others visually resemble fabrics from other locations in the Aegean. A few of the much lower number of loom weights recovered from Phylakopi are also likely to be non-local (Cutler 2011; 2012; forthcoming). Non-local loom weights have similarly been recorded from Akrotiri (Tzachili *et al.* 2015), Kolonna (Walter Gauss, pers. comm.) and the Serraglio (Vitale, this volume). The presence of loom weights manufactured from non-local ceramic fabrics at some of the southern Aegean sites can therefore provide a window into the patterns of mobility through which the new warp-weighted loom technology and associated techniques are likely to have spread. Since weaving in the Bronze Age Aegean was closely associated with women (Cutler 2011; 2012; forthcoming), the non-local loom weights are indicative of female mobility during the Bronze Age. Possible mechanisms for female mobility, both within the Aegean and beyond, include inter-marriage, migration as part of a family unit, raiding, slavery and the exchange of textile workers between elites (discussed further in Cutler 2011; 2012; forthcoming; for the possibility that women may have travelled as the result of inter-marriage, see also Gorogianni, Cutler and Fitzsimons 2015).

Cretan-style discoid loom weights were already present in earlier MBA contexts (contemporary with the MM I-II period on Crete) at Ayia Irini, Kolonna, Ialyssos and elsewhere in the northern part of Rhodes, Miletus and Lerna; they were recovered from MBA contexts at Phylakopi and Liman Tepe, and from late MBA contexts at Koukonisi (for the timing of the first appearance of discoid loom weights at the various sites, with references, see Cutler 2011; 2012). At Akrotiri the earliest published loom weights are from deposits contemporary with MM IIIA (although with the exception of the pillar pits dug for the construction of the new shelter, very little of the MBA town has been excavated). At Kastri on Kythera the earliest discoid loom weights were recovered

from a dump of material contemporary with MM IIIB-LM IA (no MBA buildings were identified during excavation, however, so it is possible that loom weights were present earlier, elsewhere on the site). The discoid loom weights from Iasos are from contexts contemporary with MM IIIB-LM IA, while those found at the Vathy Cave on Kalymnos, Teichoussa and Çeşme-Bağlararası are early LBA in date; at Çeşme-Bağlararası, loom weights of an unspecified (local?) type were also recovered from the earliest phase of the settlement contemporary with MM III (Şahoğlu 2007, 312, 319). The discoid weights recorded in the early excavations at Serraglio on Kos and the Heraion on Samos, as well as those recovered during survey work on Antikythera, Naxos and Karpathos are not closely dateable (the weights from Serraglio are likely to date to the period contemporary with LM IA Mature or LM IB; see Vitale, this volume).

The later appearance of Cretan-style loom weights at some sites suggests that in some cases the necessary technical knowledge and associated techniques may have been acquired via craftswomen from southern Aegean communities that had already adopted the Cretan warp-weighted loom technology, rather than through direct contact with Cretan weavers. It should further be borne in mind that after the adoption of the new loom type, the necessary knowledge and skills could then have been passed on through vertical transmission from one generation to the next and would thus have become a 'local' technology.

### *The Uptake of the Warp-Weighted Loom: Different Scales of Use?*

In addition to differences in the timing of the first appearance of discoid loom weights at the various sites, suggesting differences in the timing of the introduction of the warp-weighted loom, differences in the number and distribution of loom weights at the more extensively excavated Cycladic settlements of Ayia Irini, Akrotiri and Phylakopi suggest that the extent and nature of the uptake of warp-weighted loom technology was not the same in every community. At Ayia Irini, considerable numbers of loom weights have been recovered from early Late Bronze Age contexts in buildings across the settlement, suggesting the widespread use of this loom type at the site. On the other hand, very few loom weights are recorded from the site of Phylakopi as a whole, perhaps indicating a more limited adoption of the warp-weighted loom. In contrast, large numbers of loom weights were excavated at Akrotiri (more than 950), but were only recovered from four of the 11 buildings fully or partially excavated to date (Tzachili 1990; 1997, 183–184; 2007), suggesting that only some households were weaving on the warp-weighted loom (the evidence from Ayia Irini, Phylakopi and Akrotiri, together with additional sites, is discussed in Cutler 2011; forthcoming).

Even allowing for the exceptional deposition

circumstances at Akrotiri, the number of loom weights recovered from some of the buildings – c. 450 from the West House, c. 200 from complex Alpha, c. 100 from complex Beta and a significant number from complex Delta (Tzachili 1990, 381; 1997, 184) – suggests a much larger scale of textile production at this settlement than is presently documented at the other southern Aegean sites. There is additional evidence to indicate a more developed textile industry at Akrotiri. Fragments of Linear A tablets made of local clay, from complex Delta, list at least 200 units of cloth, as well as sheep (Boulotis 1998; Karnava 2008). Linear A signs scratched on an *ostrakon* recovered from the site have been interpreted as possibly recording wool and four different kinds of textiles, two of which are cloth varieties that also appear in the Linear A texts (Michailidou 1992–1993). The houses that contained large numbers of loom weights also contained significant numbers of lead balance weights conforming to the Cretan weight system (with the exception of complex Beta, which to date has not been fully excavated; Michailidou 1990, 407, 417). One of the lead weights recovered from the West House weighs c. 3 kg, thus corresponding to the weight of the Linear A wool unit, LANA (Michailidou 1990, 416). Another weight, from complex Delta, corresponds to five wool units (Michailidou 1990, 417). The large numbers of loom weights from the different buildings, together with the local recording of large quantities of cloth and the co-occurrence of loom weights and lead balance weights suitable for weighing wool, suggest the likelihood that textiles were being produced for exchange beyond the household at Akrotiri. Although there is nothing to indicate a comparable scale of production at other southern Aegean sites, it should be borne in mind that even where the number of loom weights recovered from a building does not suggest the use of more than a single loom, it is still possible that cloth for exchange was being woven, but this would not be detectable in the archaeological record.

### Weaving, Dress and Identity

The Akrotiri frescoes and fresco fragments from Ayia Irini and Phylakopi show individuals – predominantly women – wearing costumes, many of which are patterned, that are Cretan in style (for the Akrotiri frescoes: Doumas 1999; for the Ayia Irini miniature fresco fragments: Abramovitz 1980 and Morgan 1998; for the Phylakopi fresco fragments: Bosanquet 1904 and Morgan 2007). Most of the textile designs depicted in the Akrotiri frescoes could be woven using supplementary weft techniques, in which patterns are created using extra weft threads (Barber 1991, 317). Some of the lozenge designs may have been twill woven (Spantidaki 2008, 44; Marcar 2001, 28). The warp-weighted loom is well-suited for both pattern and twill weaving (for pattern weaving, see Carington Smith 1975, 691 and Tzachili 1997, 201–202; for twills, see Hoffmann 1964, 183–194 and Barber 1991,

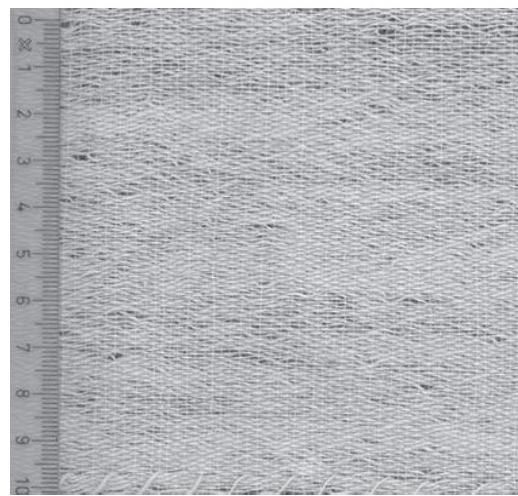
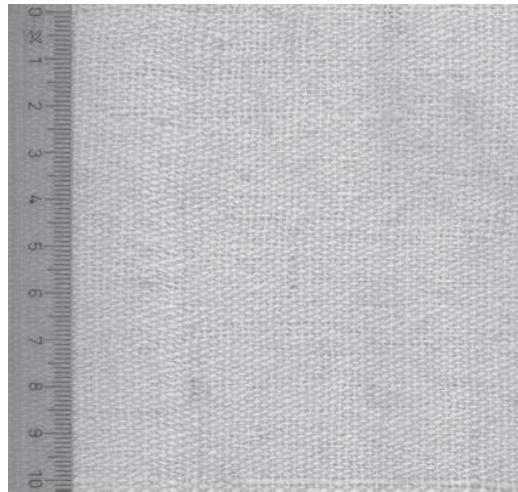


Fig. 10.2. Two tabby fabrics. Top: a balanced tabby, with approximately the same number and type of warp and weft threads per  $\text{cm}^2$ . Bottom: a weft-faced tabby, with a higher number of weft threads than warp threads per  $\text{cm}^2$ . (Photographs © CTR).

210–212, 314). The discoid loom weights recovered from the southern Aegean settlements would be optimal for weaving quite dense textiles made with finer thread types, that could be relatively balanced fabrics, that is, with approximately the same number and type of warp and weft threads per  $\text{cm}^2$  (Fig. 10.2; for the functional analysis of loom weights, see Mårtensson, Nosch and Andersson Strand 2009; Andersson Strand 2012; Cutler, Andersson Strand and Nosch 2013; Andersson Strand and Nosch 2015; for the analysis of loom weights from the southern Aegean sites, see Cutler 2011; forthcoming). In tabby weaves (in which the horizontal weft threads pass alternately over one warp thread and under the next) such textiles would work well as ground fabrics for the types of supplementary weft patterning likely to have been

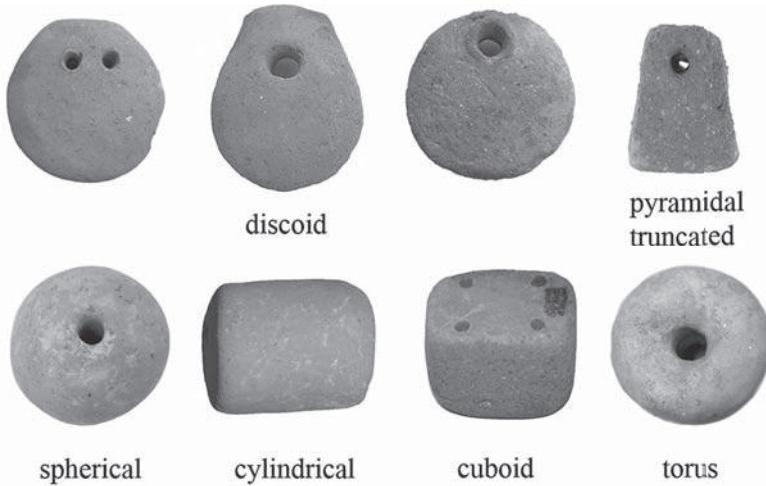


Fig. 10.3. Examples of Bronze Age loom weight types found on Crete. (Photographs: J. Cutler).

used to make many of the costumes depicted in the Akrotiri frescoes. The adoption of warp-weighted loom technology across the southern Aegean may therefore have been at least partially motivated by a desire to make Cretan-style textiles (*cf.* also Davis 1984, 162; Tzachili 1990, 388).

Although cloth and dress play an important role in communicating various aspects of social identity (Wobst 1977; Schneider 1987; Eicher 1995; Roach-Higgins *et al.* 1995), the role of textiles in the ‘Minoanisation’ of the southern Aegean has received little attention; no doubt largely owing to the fact that so few cloth fragments have survived. It has been argued that ‘fashion’ is a term that is applicable only to a specific system of dress that emerged in the fourteenth century AD European courts (linked to the first appearance of a bourgeois class), and that it is characterised by “regular and systematic change” (discussed in Entwistle 2000, 43–46; Tseelon 1992; Polhemus 2011, 32–39). According to this definition, fashion is linked to societies in which social mobility is possible and is motivated by emulation; Entwistle notes that it developed “as a tool in the battle for social status” (Entwistle 2000, 44; see also Tseelon 1992; Pohemus 2011, 32–34). Traditional dress, on the other hand, changes much more slowly “often so slowly that the changes are imperceptible to the people themselves” (Entwistle 2000, 46; *cf.* Polhemus 2011, 34–36), and is associated with societies in which tradition and cultural stability are highly valued (Polhemus 2011, 39). While the definition of fashion as regularly and systematically changing may not apply to the Bronze Age Aegean, it could be argued that ‘fashioning’ an identity – the desire to be seen in a particular way and to be associated with certain ways of doing things – may have played a part in the motivation for communities or groups within communities in the southern Aegean to adopt Cretan-style costume (as well as other aspects of Cretan material culture). If the

emulation of Cretan dress was initially at the level of local elites, possibly as part of a wider process of legitimisation, then any subsequent wider adoption of Cretan costume (together with the associated loom technology) may have been the result of a desire to copy these local elites, rather than a wish to emulate specifically Cretan clothing styles.

Similarly, if Cretan-style textiles were being woven on the warp-weighted loom in southern Aegean communities, with some of these textiles possibly also being produced for exchange beyond the settlement where they were made, such ‘imitations’ may have been the only ‘Cretan’ cloth consumers at some of the smaller southern Aegean sites came into contact with. While these textiles may have been valued for their ‘Cretan-ness’, they may alternatively have been in demand because of their association with the cultural identity of the community that had produced them, rather than as a result of any perceived association with *Cretan* material culture *per se*.

#### **Different Loom Weights, Different Fabrics**

On Crete itself, a range of loom weight types were in use during the Bronze Age (Fig. 10.3; for an overview of the different loom weight types, see Evely 2000, 498–502; Burke 2010, 52–54). Different combinations of loom weight types have been recovered from different sites and, since different types of loom weights are suitable for making different types of textiles (Mårtensson, Nosch and Andersson Strand 2009; Andersson Strand 2012; Cutler, Andersson Strand and Nosch 2013; Andersson Strand and Nosch 2015), this indicates that different ranges of fabrics were being woven in different Cretan settlements (Cutler 2011; forthcoming). It is therefore notable that in nearly every case, it is only the discoid type of loom weight that is found in sites beyond Crete.

At Knossos (widely considered to be the main source of the ‘Minoanising’ influence evident in southern Aegean settlements) during the Neopalatial period, with the exception of only one or two discoid weights, the loom weights used were all spherical in shape (in contrast, almost all the loom weights recovered from Protopalatial contexts at Knossos are the discoid type; Cutler 2011; 2012). In contrast to the discoid loom weights, which would be suitable for weaving fabrics with quite a high number of warp threads per cm and would be optimal for producing fine and relatively balanced fabrics, the spherical weights would be suitable for making textiles with more widely spaced warp threads, that are likely to have been weft-faced, that is, with a higher number of and/or thicker weft threads than warp threads per cm<sup>2</sup> (see Fig. 10.2). While spherical loom weights have also been recovered from other sites on Crete such as Phaistos (Militello *et al.* 2015) and Malia (Cutler, Andersson Strand and Nosch 2013 for Quartier Mu), they have a much more limited distribution than the discoid weights, suggesting that production of the textiles made with them, and perhaps the associated weaving techniques also, may have been more restricted. Thus, while the presence of the discoid loom weights indicates that southern Aegean communities could have produced textiles of Cretan type using the warp-weighted loom, they were not producing the full range of textiles that were made on Crete.

## The Later Bronze Age

### *The Use of the Warp-Weighted Loom in the Southern Aegean in LB II–III*

Loom weights dating to the LB II–III period are recorded from sites both on Crete and in the wider southern Aegean, attesting to the continued use of the warp-weighted loom, although at many of the settlements only low numbers of weights have been recovered. On the southern Greek mainland, after the disappearance of cylindrical loom weights at the end of the EBA (with the exception of the few early MBA discoid loom weights from Lerna), it seems on present evidence that loom weights did not reappear until LH II–III, and even then are rare (Carteron Smith 1992, 688–689). Some of these loom weights are Cretan-style discoid loom weights; the other weights are trapezoidal/oblong, and have flattened or grooved tops, suggesting that they were modelled on the discoid variety.

The late appearance of loom weights on the southern Greek mainland suggests that after its initial use in the EBA, the warp-weighted loom was not (re-)adopted until the LBA; most of the evidence suggests a date of LH II–IIIA1 (Carteron Smith 1992, 688–689), the period of the emergence of the mainland palatial centres. The presence of Cretan-style loom weights among the early examples suggests that influence for the (re-)adoption of this

technology came either from Crete itself, or other southern Aegean communities that had by this time been using the warp-weighted loom for several generations.

On Crete, as in the rest of the southern Aegean, there is a strong mainland influence evident in the LB II–III material record (Driessen and Farnoux 1997; Rehak and Younger 2001; Preston 2008). The Linear B archives, written in Mycenaean Greek, suggest mainland administration at Knossos during the LMII–IIIA2/IIIB1 period (for the debate on the date of the Knossian archives, see Popham 1993; Driessen 2000, esp. 9–13, 217–228; Rehak and Younger 2001, 452). The manufacture of (woollen) cloth was a major part of the Knossian palatial economy, with the Linear B texts recording up to 100,000 sheep and an estimated 1,000+ adult female weavers, as well as children and other specialist workers within the textile industry, such as spinners, fullers and finishers, that were overseen by the palace (Melena 1975; Killen 1964, 2007; Burke 2010). The presence of the logograms used in Linear B for sheep, wool and certain types of textiles in the limited corpus of earlier Linear A tablets from Crete, as well as certain aspects of the organisation of textile production and associated vocabulary recorded in the Knossian Linear B archives, indicate that the Mycenaean period palatial textile industry is likely to have developed out of an already established Cretan textile production system (Killen 1984; Alberti 2007; Del Freo *et al.* 2010; Petrakis 2012). Furthermore, on the southern Greek mainland, there is currently no evidence for the existence of an organised textile industry before the emergence of the Mycenaean palatial economies of the later LBA (although in the absence of texts, an organised textile production system is difficult to identify, especially in cases where a loom type other than the warp-weighted loom was in use).

The timing of the first appearance of loom weights on the southern Greek mainland indicates that it is likely that warp-weighted loom technology was not adopted until a group or groups from the mainland had had first-hand experience of the textile industry on Crete. The absence of loom weights in the period contemporary with the Cretan Neopalatial may represent either resistance to the technology and/or lack of access to the necessary skills. The late appearance of loom weights on the southern mainland, together with their form (Cretan-style discoid or derivative types), therefore suggests that this represents a late, reflux ‘Minoanising’ influence on the mainland.

### *The Appearance of Spools*

A new class of artefact – unpierced cylindrical or slightly ‘waisted’ objects generally referred to as spools – became common at many sites in the Aegean and wider Mediterranean during the period contemporary with LH IIIC (Rahmstorf 2003; 2005; 2008; 2011). These objects, which are often unbaked or poorly fired, are almost certainly

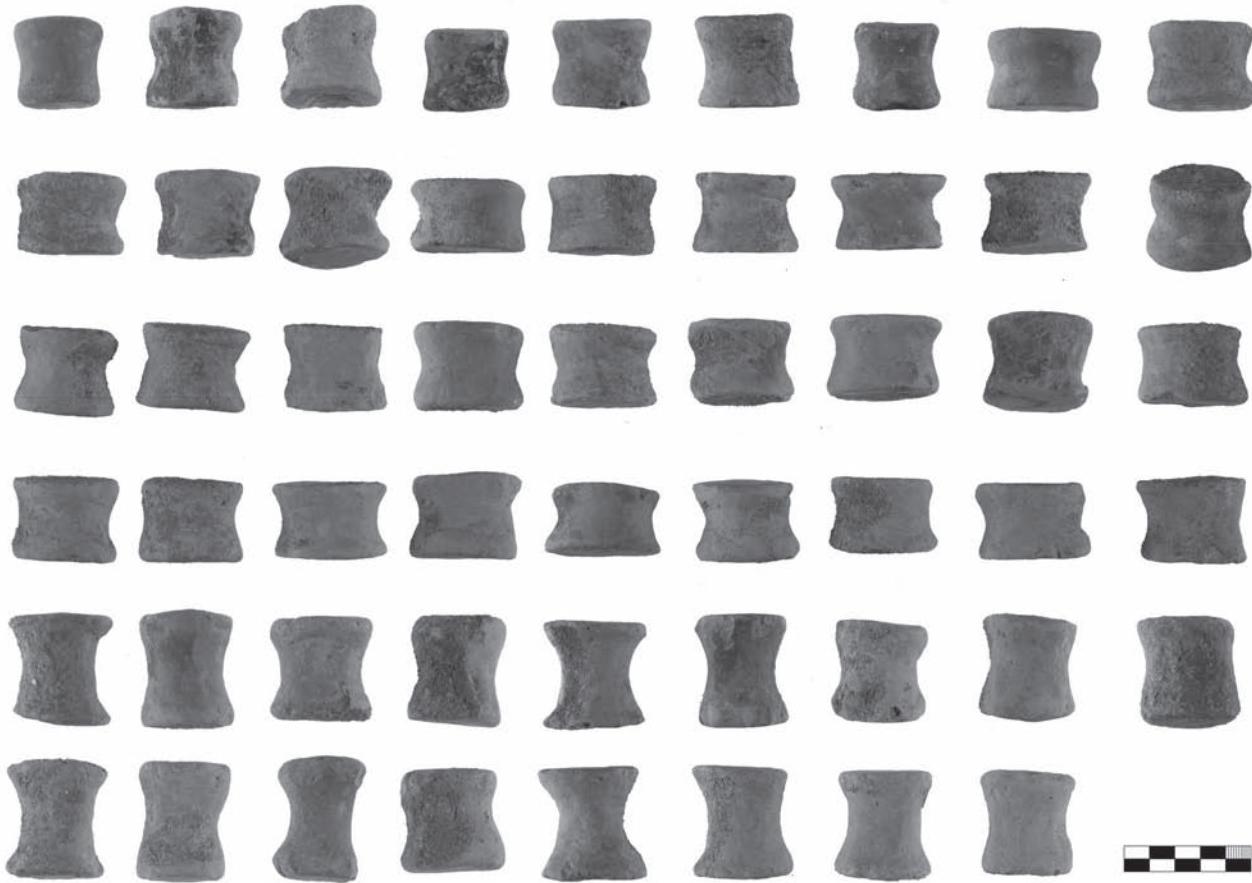


Fig. 10.4. Spools from an LM IIIB context in Building CD, Room 3.6 at Sissi, Crete. (Photographs: C. Papanikolopoulos © Sissi archaeological project.)

associated with weaving, since they are often found in groups and sometimes co-occur with other textile tools; a 9th century BC Cypriot bowl additionally depicts spool-shaped weights attached to the warp threads on a loom (Aspris 1996; Rahmstorf 2005, 156; 2011, 322). The spools occur in a range of sizes. Experimental work has shown that the larger spools, weighing c. 100 g or more, would work well as loom weights on the warp-weighted loom, and would be well-suited for the production of textiles with quite widely spaced warp threads, that are likely to have been weft-faced fabrics (Mårtensson *et al.* 2007). Lise Ræder Knudsen has demonstrated that smaller spools, weighing c. 50 g or less, would work well as weights in the tablet weaving of textile borders, and Barber has observed that they would work well in cord plaiting techniques (Barber 1997; Ræder Knudsen 2002, 228–229). Spools of intermediate weight could potentially be used either as loom weights for finer thread types, or as weights in tablet weaving or in cord plaiting.

Spools therefore represent a new type of weight in the later Bronze Age, some of which may be associated with tablet weaving techniques and the production of borders, and separate bands. At present, the origin of this new type

of weight is unclear, however. On the Greek mainland, they do not seem to have appeared until LH IIIC Middle, and therefore postdate the destruction of the Mycenaean palatial centres (Rahmstorf 2005, 147). Within the Aegean and wider eastern Mediterranean, the earliest examples identified to date are from Crete. Low numbers of clay spools have been recovered from a few MBA (c. 17th/16th–14th centuries BC) sites in Italy, although they did not become common in Italy until the late 12th century BC (Rahmstorf 2011, 321).

On Crete, spools have been recorded in LM IIIB2 contexts at Khania (Wiman and Bruun-Lundgren 2003, 266; Rahmstorf 2005, 149). Recently, two groups of spools, 58 in total, were found in a LM IIIB context in Building CD, Room 3.6 at the site of Sissi (Fig. 10.4), and a few were recovered from even earlier, probable LM IIIA2–B1, contexts in Quartier Nu at Malia (Gaignerot-Driessen 2012, 73). The Sissi spools (currently under study), weigh 50–76 g. If used as loom weights, they would only be optimal for use with very fine thread. They would produce fabrics with very widely spaced warp threads, and would therefore only be well-suited for making weft-faced textiles. They could alternatively be used in tablet weaving, with slightly thicker thread.

### **Different Textile Tools, Different Weaving Techniques and Forms of Dress?**

Although loom weights were present on the southern Greek mainland in LH II–IIIB, they have only been recovered from a limited number of contexts, and are very few in number (Nordquist 1987, 126; Carington Smith 1992, 688–689; Walberg 2007, 187; Rahmstorf 2008, 52–73; Alberti *et al.* 2012). It is possible that this may be because few loci of textile production have been excavated. Although some Cretan-style textiles are depicted in mainland frescoes (mostly in ritual/ceremonial contexts), a frequent form of dress represented, for men and also for women, is a plain tunic with patterned bands at the edges/seams. This costume type is also seen in some of the LM II–III Cretan frescoes, as well as on the Ayia Triada sarcophagus, while patterned bands are also represented in MM IIB/III–LM I iconography on Crete and in the LM IA Akrotiri frescoes (for an overview of the evidence, see Carington Smith 1975, 467–468; Barber 1991, 322–325; Marcar 2001, 156–164; 2004, 232). While the warp-weighted loom is well-suited for pattern weaving and twill weaving, plain cloth can be woven on any type of loom, and patterned bands can be woven on a band loom or by tablet weaving (for band looms, see Barber 1991, 116–118; for tablet weaving, see for example, Collingwood 1982; Barber 1991, 118–122). It is therefore possible that there was not a widespread uptake of the warp-weighted loom in southern mainland communities during this period.

On present evidence, the earlier contexts of the unpierced spools on Crete suggest that the use of this new type of weight, at least some of which would be well-suited for use in tablet weaving the kind of patterned bands and borders seen in the later LBA iconography both on the Greek mainland and on Crete, may have been transmitted from Crete to the mainland, rather than the other way round. The tablets used in tablet weaving are generally made from organic material such as wood or bone and therefore rarely survive except in favourable preservation conditions. However, there is some archaeological evidence to suggest the existence of tablet weaving in Crete during the Bronze Age. Square-shaped bone or ivory plaques with a hole in each corner, suitable for use in tablet weaving, have been recovered from Protopalatial contexts from Phaistos (Levi 1976, pls. 240, 241, 243; Burke 1998, 85, pl. 95, pl. 2.7b). It is possible that a fragment of a wooden plaque from the Unexplored Mansion at Knossos, with two straight edges and a hole in the preserved corner, might also be the remains of a tablet for tablet weaving (although the hole is positioned quite a distance from the edge; see Popham 1984, 64, M 134, pl. 223c).

No unpierced spools are present among the textile tools at Ayia Irini or among the published material from Phylakopi. Although a few spools have been recovered from deposits at Miletus broadly contemporary with LH III (these are

currently under study: Gleba and Cutler 2012), with the exception of a single example recorded from Emporio on Chios (Hood *et al.* 1981–82, 631, pl. 131.25; Rahmstorf 2005, 161–162), none have to date been published from the islands of the southeast Aegean, although in some cases it is possible that this may be owing to limited publication of early excavations. The absence of spools from the southern Aegean island settlements may be owing to a lack of knowledge of the new form of weight in the island communities. Alternatively, it may have been the result of a conscious choice by local weavers not to adopt the new weight type and associated techniques; that is, in the case of the larger spools, the production on the warp-weighted loom of textiles with more widely spaced warp threads (likely to be weft-faced fabrics), and in the case of the smaller spools possibly the type of tablet weaving technique for which these would be well-suited.

On the mainland, the LBA iconographic depictions of bands predate the appearance of the spools, and the earlier Aegean representations of patterned bands indicate that they were also being woven prior to the LB II–III period. Although very few Bronze Age cloth fragments have been recovered from the Aegean and there are no archaeological textiles to corroborate it, Bronze Age textile finds from elsewhere in Europe show that the weaving of a heading band on a separate band loom in the preparation of the warp for a warp-weighted loom was practised in Europe during this period (see Hoffmann 1964, 153–190; Barber 1991, 116, 134). Therefore, while the introduction of spools may at least in some cases be indicative of a particular band weaving technique, since bands can be woven using other techniques – the tablet weaving of separate bands can be practised, for example, by fastening the warp threads to a belt around the weaver's waist rather than by using weights, and textile borders can be woven on the warp-weighted loom, using a different group of weights to the loom weights used for the textile itself (Barber 1991, 117–118) – it should be borne in mind that the absence of spools need not necessarily indicate the absence of band weaving, or a concomitant rejection of the types of clothing with decorative bands seen in the later LBA iconography.

### **Conclusions**

In most cases, the appearance of discoid loom weights at settlements across the southern Aegean during the Middle and early Late Bronze Age appears to represent the introduction of the associated warp-weighted loom technology at these sites, rather than solely the adoption of a new type of loom weight. The length of time needed to fully master complex skills such as weaving necessitates sustained interaction between novice and more expert practitioner, and the non-local loom weights recovered from

some of the settlements provide insight into the networks of textile craft knowledge and know-how through which the new technology and associated techniques are likely to have been transmitted. The warp-weighted loom is well-suited for making patterned textiles and twill fabrics, and the discoid loom weights recovered from the southern Aegean settlements would be ideal for weaving the types of fine textiles represented in the Cycladic frescoes; the new loom type may therefore have been adopted at least partly from a desire to produce Cretan forms of dress. However, although the discoid loom weights indicate that Cretan-style textiles could have been woven in southern Aegean settlements, the much wider range of loom weights found on Crete demonstrates that southern Aegean communities were not making such a wide range of fabrics on the warp-weighted loom as was being produced on Crete itself.

The differences in the timing of the appearance of the discoid loom weights at the southern Aegean sites, and the apparent differences in the extent and nature of the use of the warp-weighted loom, indicate that there were variations in the patterns of adoption and uptake of the technology. Since weaving in the Bronze Age Aegean was almost certainly a female craft, the evidence for the adoption of the warp-weighted loom and the probable associated production of Cretan-style textiles (together with the fact that it is mostly women depicted wearing Cretan-style dress in the southern Aegean iconography) highlights the role of women as both producers and consumers in the ‘Minoanising’ phenomenon, which has received little explicit attention in the past.

The late appearance of loom weights on the southern Greek mainland suggests that the warp-weighted loom was not (re-)adopted at southern mainland sites until the beginning of the Mycenaean palatial period. While spools represent a new phenomenon in the later Bronze Age Aegean, the earliest currently known examples derive from Crete. Therefore, although at least some of the spools would have been suitable for weaving the kind of bands/borders associated with the types of dress depicted in the LBA mainland Mycenaean iconography, their appearance does not appear to represent a mainland innovation. Furthermore, the lack of spools from Ayia Irini and Phylakopi, and, on present evidence, their apparent absence from the southeast Aegean islands that had earlier adopted discoid loom weights, suggests either changing networks of textile craft knowledge during the later period, or resistance to the adoption of this new form of weight and associated weaving techniques – and in some cases, possibly also associated forms of dress – in the island settlements.

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## Note

- 1 Additional weights from Ayia Irini are also possibly non-local. A petrographic study of the loom weights is planned, in collaboration with Evi Gorogianni and Jill Hilditch (Ayia Irini) and Margarita Gleba and Jill Hilditch (Miletus).

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## MYCENAEANISATION IN THESSALY: A STUDY IN DIFFERENTIAL ACCULTURATION

*Bryan Feuer*

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### **Introduction**

In this chapter I describe and discuss the process of Mycenaeanisation in Thessaly. Although my analysis is similar to the others in this book in its emphasis on acculturation, it also differs from them in several significant ways. First, it does not compare and contrast Minoanisation and Mycenaeanisation, but rather focuses only on the latter phenomenon. Second, the geographical context is more topographically varied, encompassing several climatic and vegetational zones rather than the almost wholly Aegean and Mediterranean focus elsewhere. In addition, Thessaly represents the only case in which the Mycenaean core zone is contiguous to a periphery, accessible by land rather than by sea. Finally, the ethnic or cultural identities of the indigenous Aegean societies studied elsewhere in this volume are neither Minoan nor Mycenaean, whereas Thessaly contains both Mycenaean and non-Mycenaean populations (in my opinion), thus enabling me to compare and contrast several different groups within the same region and to investigate a range of acculturation from minimal to almost total acceptance of Mycenaean cultural elements.

I will begin by situating the phenomenon of Mycenaeanisation within a broader theoretical and methodological context of culture contact and culture change. Utilizing a core/periphery model, I will focus specifically upon the process of acculturation, first in general terms and then more specifically in respect to Mycenaeanisation. Finally, I will describe and discuss the process of Mycenaeanisation in the region of Thessaly.

My analysis is based upon the premise that culture is neither unitary nor homogeneous, but is differentially shared and participated in. Individuals, groups, communities and societies all represent congeries of elements of material

culture, practices, and beliefs which overlap partially, but not completely. Variables including age, gender and class – as well as possibly urban/rural distinctions or regional diversity – all influence and determine which elements comprise a specific cultural repertoire. Thus rather than a clearly delineated entity with sharp and definable boundaries, not only are the borders of a cultural group diffuse and permeable, but aside from a core of common elements, such groups are internally variable as well (Stein 2005, 9). Moreover, such cultural configurations are not static, but are rather fluid and subject to modification, alteration and permutation.

For prehistory, this perspective is similar to David Clarke's articulation of polythetic archaeological cultures (1978). This means, *inter alia*, that the terms Minoan, Mycenaean, Cycladic, etc., represent convenient modern cultural designations rather than necessarily indicating how such people or their contemporaries perceived themselves or others. This point becomes particularly salient in respect to identity, especially in peripheral zones (Broodbank 2004, 50–54; Feuer 2011). Even so, the limits of cultural definition or self-definition are not infinitely elastic and all societies recognize boundaries that separate or distinguish them from other groups, from the Other (Cusick 1998, 4). It is at these boundaries, in border and frontier zones, where contact with the Other is most likely to occur. I therefore invoke models of core/periphery interaction in order to investigate and characterize cultural contact situations while rejecting aspects of world systems or colonisation theories which presuppose dominance or unidirectional change from centre to periphery (*e.g.*, Rice 1998, 47–50; Stein 2005; Knappett and Nikolakopoulou 2008).

## Culture Contact

Cultural interaction can occur in a wide variety of contexts and involve various agents and processes. Interaction can be neutral, friendly or hostile. It can occur in social, political, economic and ceremonial contexts, and in many cases may involve more than one of these aspects simultaneously or serially. The typical venue for such encounters is, in both spatial and social terms, an intermediate contact zone, external to the centre of at least one group, *i.e.*, peripheral zones such as borders and frontiers (Rice 1998; Feuer 2003; 2011).<sup>1</sup> Such places, often characterized as middle ground or a third space, comprise arenas hospitable to the interchange of objects, techniques or concepts. Such contact situations are structured but not deterministic, involving processes of social and cultural integration leading to mutual borrowing and the subsequent revision of cultural elements (Spicer 1961, 519; White 1991; Cusick 1998, 6–7; Antonaccio 2003, 60). The potential permutations of such encounters are virtually infinite, ranging from two individuals to entire groups, and from single meetings to daily intercourse. While a single contact is unlikely to result in measurable change, repeated, regular or even daily interaction is likely to result in a wide range of outcomes along a continuum of lesser to greater integration (Willey *et al.* 1956; Spicer 1961; Herskovits 1967, 174; Gosden 2004).

## Diffusion

One interaction process studied intensively by anthropologists and archaeologists, and closely related to acculturation, is diffusion, which can be defined as the acceptance of something new or different by individuals or groups linked by specific channels of communication within a sociocultural structure (Wagner 1988, 179–181; Kristiansen and Larsson 2005, 25–27). Although diffusion studies have fallen out of fashion, the basic concept, of transmission and reception, is still, in my opinion, valid.<sup>2</sup> Various mechanisms may be involved, although the most common ones are cultural and/or economic (Hugill and Dickson 1988).

The process of diffusion often, but not invariably, follows a sequence whereby objects of material culture are initially transmitted and/or borrowed, usually by means of exchange, sometimes, but not always, followed by methods, and finally ideas; this sequence is not, however, inevitable and things, practices and beliefs may also be transmitted simultaneously. Most commonly, individual traits or items are borrowed, but on occasion packages or bundles of related things may be transferred (van der Leeuw 1983, 24; Butzer 1988, 105).

Diffusion can occur as the result of migration whereby an entire cultural repertoire or assemblage is physically relocated; colonisation is the most common form of what is referred to as primary diffusion. In secondary or stimulus diffusion, however, items or ideas can move without direct

face-to-face contact, by means of intermediate parties, such as through down-the-line trade. Trade, especially long-distance exchange, has been considered a significant causal factor in sociopolitical evolution, in addition to the transfer of goods (Schortman and Urban 1987, 45–52). At least two phases of transmission usually occur: external diffusion from one group to another, followed by internal diffusion within a group (Schortman and Urban 1987; Butzer 1988, 106).

## Acculturation

Although I have somewhat arbitrarily separated diffusion and acculturation as related aspects of culture contact and change for purposes of discussion, it should be apparent that in operational terms – and in an archaeological context – they are in fact inextricably intertwined, and it is often difficult to distinguish where diffusion ends and acculturation begins (Herskovits 1967, 159–171; van der Leeuw 1983; Kristiansen and Larsson 2005, 25–27; *e.g.*, Redfield *et al.* 1936, 145–146). Acculturation can be defined as “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups” (Redfield *et al.* 1936, 145–146).<sup>3</sup> It is “the internal or local process of assimilating foreign cultural traits as a result of diffusion between cultures. In this process the new traits are recontextualised and given meaning” (Kristiansen and Larsson 2005, 26–27), thus comprising both the processes and the results of culture contact (Foster 1960, 7).

In most instances, particularly where regular or patterned interaction occurs, the outcome may range along a continuum from no change to radical alteration. At one end of the continuum no borrowing – and thus no change – may occur due to lack of interest, active resistance or rejection. At the other end of the continuum is wholesale transformation, resulting in assimilation or ethnogenesis; in the former case, wholesale adoption of another culture almost always is imposed by force or coercion; in the latter instance a new cultural entity – and identity – emerges from a process of hybridisation.<sup>4</sup> Between these extremes falls partial acculturation, involving the exercise of choice ranging from the acceptance of a single item, trait, method or idea to substantial borrowing of multiple elements of different kinds, some of which may comprise “packages” of related cultural aspects. The acceptance and internal diffusion of single traits is obviously easier and simpler than a complex of things, practices and concepts, and the need for modification and adjustment is necessarily greater in the latter case (van der Leeuw 1983, 24; Butzer 1988, 105; Okun 1989, 135–136; Feuer 2011).

By means of diffusion, options for change are presented or made available. Where a middle ground exists actors

exercise agency both in offering cultural elements and selecting those aspects which are sufficiently appealing to justify the effort of appropriation and whatever adaptation is necessary in order for incorporation. The concept of agency assumes some significance here in that the actors are perceived as neither entirely free agents – *i.e.*, they are constrained by local social, political and economic conditions – nor are they wholly powerless drones unable to exercise choice.

A significant feature of acculturation is that the context and significance of the diffused item almost inevitably differ in the respective societies. Therefore general-purpose items are often more easily accepted than those which have a limited and specific function. Items whose use is transparent and easily apprehended also tend to be incorporated more readily. In general, things whose utility<sup>5</sup> is easy to ascertain are more likely to be adopted, particularly when they are recognized as meeting a perceived need; thus new techniques or technologies tend to supplement rather than replace elements of the local culture and are adapted and fitted into the existing system (van der Leeuw 1983, 24; Okun 1989, 135–136; Dietler 1997; 2005; Antonaccio 2003; Gosden 2004).

Just as those who are responsible for diffusing cultural elements are not necessarily representative of an entire group, those who choose or select them for incorporation are usually subgroups of the whole as well. Any society is composed of those who generally resist change, those who are attracted to innovation and a large proportion who accept change, but are not in the vanguard. In stratified societies, emerging or existing elites seem particularly receptive to innovations which might legitimize, enhance or maintain their prestige, wealth or power (Schortman and Urban 1998, 111; Smith 1998). As a result, elites and urban populations tend to be the first to accept and adopt innovations and become more quickly and thoroughly acculturated than lower classes and rural populations. Such acquisitions are then displayed and manipulated in public contexts such as weddings, burials or other public ceremonial occasions and signal status and identity to various constituencies, including the local community and other elites with whom they are both trading and competing (Okun 1989, 135–136).<sup>6</sup> Public feasting, for example, seems to have been a frequent occasion for the conspicuous use of imported items and practices such as exotic foods, eating and drinking vessels and utensils and ceremonial activities (Dietler 1997; 1998; Vianello 2005; Galaty and Parkinson 2007; Vives-Ferrández 2008, 264; Mac Sweeney 2009). This ‘commensal hospitality’ ‘becomes a key element in establishing relations of reciprocal obligation that bind together host and guest. Drinking also has a common function of promoting social solidarity through its institutionalized role in the context of formal community social rituals, such as festivals and religious rites’ (Dietler 1998, 302).

One aspect of acculturation to which I have devoted some study is its effect on the creation and maintenance of cultural identity (Feuer 2011; cf. Vives-Ferrández 2008; Mac Sweeney 2009). Adherence to cultural or ethnic identity is certainly one of the variables which affect the decision to adopt foreign cultural elements. Likewise, any change in material culture, social practices or beliefs will of necessity – whether consciously or not – modify personal or class identity. If an entire society – or even a large proportion of it – accepts a relatively small number of things from other cultures, its cultural identity may shift a bit (because, in fact, societies are never completely static), but unless such changes involve the deliberate adoption of specific ethnic markers, they are unlikely to influence how that identity is perceived. However, if or when a substantial portion of a society accepts and incorporates external elements, leading to a hybrid culture, or if two groups exchange a significant number of cultural elements, then a new cultural identity begins to emerge which if carried far enough leads to ethnogenesis, the creation of a distinct cultural or ethnic identity (Deagan 1998; Smith 1998, 258; Hall 2000; Voskos and Knapp 2008). Similarly, if the process of assimilation is sufficiently thorough, the original identity of a group may be lost and replaced by the adopted identity (Ezell 1961; van der Leeuw 1983; Okun 1989).

In summary, as James Axtell (1981, 247) states:

... acculturation is a mutual process that affects each culture somewhat differently. The differences derive essentially from the nature of the cultures that meet and the conditions of contact. Cultures can be relatively open and flexible or closed and rigid, depending on such variables as their capacity for corporate definition, size, social integration, kinship and settlement patterns, and attitudes toward, distance from, and relative power vis-a-vis strangers. They can also be aggressive, intent upon directing or inducing change in the cultures they meet, or largely defensive, willing to tolerate other cultures in return for the freedom to determine their own cultural imperatives and strategies. Whatever their natures, the outcome of contact also depends upon the historical time, demographical space, and geographical place in which the cultures meet. The changes that result from this contact vary from microscopic introductions of cultural materials and traits – new cultural contents – to macroscopic alterations of fundamental structures and patterns – new cultural forms for integrating and assimilating foreign elements.

And it should be clear, I think, from this brief overview that acculturation is a complex process with many variables and multiple outcomes.

### Mycenaeanisation

Having briefly explored the broader contexts of culture contact and change, I now turn my attention to a specific instance of acculturation in the Bronze Age Aegean often

referred to as Mycenaeanisation, a process which began in Late Helladic II, reaching its peak in Late Helladic III A-B. Prior to this, however, in the late Middle Bronze Age and early Late Bronze Age, some parts of the Greek mainland, particularly the Peloponnese, were strongly influenced by Minoan civilisation, and therefore became Minoanised to some extent. The earlier process of Minoanisation thus served as a model for the Mycenaean elite for the later and similar process of Mycenaeanisation. The emerging Mycenaean polities emulated many aspects of Minoan civilisation, and they also eventually established contact and relationships with many if not most of the settlements originally within the ambit of Minoan influence and/or control (Galaty and Parkinson 2007; Shelton 2010; but cf. Dickinson 1994, 253–254).

As the emerging Mycenaean elites looked outward for trade opportunities to enhance their wealth, status and power, they became increasingly involved in the extensive eastern Mediterranean exchange network, establishing relationships throughout the Aegean with other local elites; it seems that for the most part they were seeking metals and rare or exotic raw materials, in return for which they traded finished craft products (Galaty and Parkinson 2007; Shelton 2010, 143–145). Other variables influencing the nature and degree of Mycenaeanisation were geography and the kinds of societies within the Mycenaean orbit. The geography determined what resources might be attractive to Mycenaean traders as well as the needs and desires of the local inhabitants, particularly local elites who were controlling access to those resources. These trading relationships of course involved social and political aspects as well. It is possible, however, that even if an elite class within a given society became Mycenaeanised, other elements or groups within that society might have resisted or rejected Mycenaeanisation or adopted only certain aspects of Mycenaean culture, resulting in a spectrum of acculturation, as had occurred earlier on the Greek mainland in respect to Minoan culture.

Early contact may have been initiated by adventurous individuals or groups in search of opportunities, first sporadic or intermittent, subsequently increasing in tempo and frequency; very likely these encounters would have involved *inter alia* ceremonial gift exchange and feasting (cf. Dietler 1998). These preliminary phases would have established relationships and patterns of interaction leading to more intensive and institutionalized social and economic networks. Archaeological evidence indicates that material items, most prominently pottery, were the first elements of Mycenaean culture to be accepted, followed by methods and techniques, and finally social, political and religious ideology (Feuer 2004, 103–111, 133–159).

In the most heavily Mycenaeanised areas all of these aspects of Mycenaean culture were borrowed and adapted; in the least Mycenaeanised locales, borrowing may have been primarily restricted to pottery and some other aspects

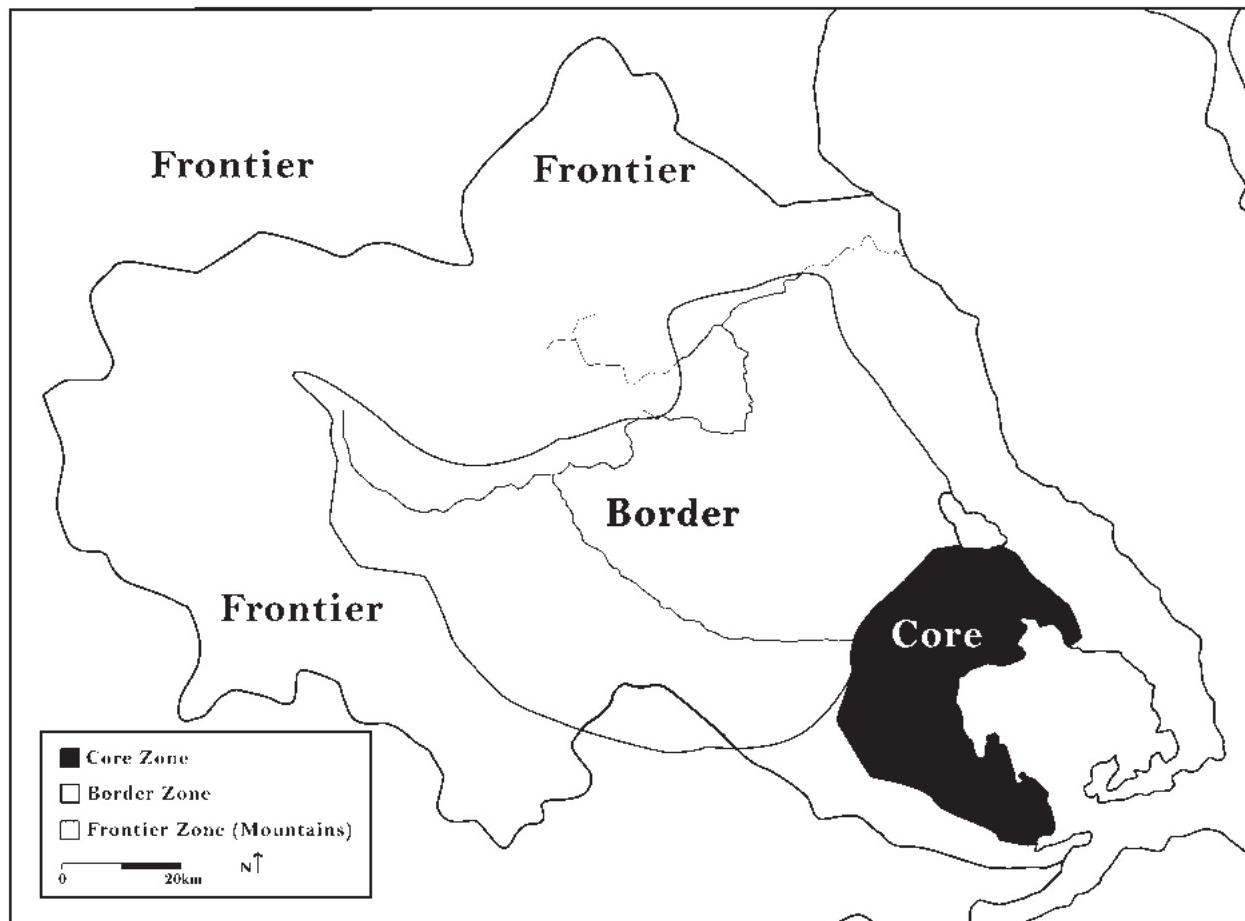
of material culture. Initially items would have been obtained through exchange, but eventually in many areas, accompanying technology transfer, items would have been made by itinerant or resident Mycenaean craftspeople and/or local craftworkers. It has generally been assumed that the more borrowed aspects of culture present, the greater the degree of acculturation (e.g., Ezell 1961; Herskovits 1967; Cusick 1998). Moreover, certain cultural elements or kinds of artefacts have been considered to be possible Mycenaean ethnic or cultural markers or diacritics, integral rather than marginal elements of Mycenaean culture or identity. For Mycenaean civilisation, some of the most distinctive cultural markers included tholos and chamber tombs, the megaron, bronze weapons, Linear B, figurines, pottery, sealstones and certain kinds of jewellery such as relief beads (Feuer 2011, 512–513). As an example and case study of the range of acculturation in the northern periphery of the Mycenaean world, I now turn my attention to Late Bronze Age Thessaly.

### Late Bronze Age Thessaly

Thessaly, in north-central Greece, is one of its largest and most geographically varied provinces, and as a result can be subdivided into a number of constituent subregions. The southeastern coastal region – which is roughly equivalent to the modern nome of Magnesia – should be considered part of the northern Aegean area, with a Mediterranean climate allowing for the cultivation of vines and olives, and like other coastal Aegean locales is easily accessible by sea, facilitating trade and communication.

The inland plains to the north and west, however, are part of a transitional ecological zone more similar to the climate, topography and vegetation of the European continent rather than the Mediterranean coastal environment and the Mycenaean core area further south. I have argued elsewhere that this environment was less hospitable to the typical Mycenaean subsistence economy and lacked other resources attractive to the Mycenaean states of the core zone, including that of Dimini/Iolkos, which seems to have been oriented more toward maritime trade and communication than exploitation of the inland plains (Feuer 1983, 188–190; 1994; 2003; 2014). These large interior areas – which encompass the nomes of Larisa, Karditsa and Trikala – can be further subdivided into eastern and western plains divided by a line of foothills running in a northwest-southeast direction.

The third topographical region within Thessaly is comprised of the impressive Pindos and Chasia mountains to the west and north respectively. Although this environment is suitable for grazing, agriculture is limited to small, isolated valleys, temperatures are more extreme, and rainfall is more abundant. In other words, this part of Thessaly is inhospitable to sedentary habitation and represents a formidable barrier



*Fig. 11.1: Core, Border and Frontier Zones in Thessaly.*

to movement, transportation and communication except by way of a few narrow passes (Feuer 1983, 32–38, 91–92).

It is my assertion here that cultural variation in Thessaly can be roughly correlated with equivalent geographical variation and that these three subregions can be characterized as core, border and frontier zones (Fig. 11.1) respectively (Feuer 1983, 179–200), or from a world systems perspective, core, semi-periphery and periphery (Wallerstein 1974). I further assert that the degree and nature of acculturation – *i.e.*, Mycenaeanisation – similarly varied in each of these subregions (*cf.* Andreou *et al.* 1996, 550), and in the ensuing discussion I will elaborate these distinctions, beginning with the coastal region, then the interior plains, and finally the surrounding mountains. Following this discussion, I will describe and analyse the distribution of various aspects of Mycenaean material culture in these subregions as well.

#### **Core Zone**

The coastal region, as noted above, is that part of Thessaly most similar to the Mycenaean core zone of southern

and central Greece in climate, topography, and maritime orientation. Perhaps not surprisingly, then, it also shares considerable cultural similarities as well, so much so that it can in fact be considered the northernmost extension of the core Mycenaean area. This connection, which can be most clearly seen at the site of Pevkakia in the Gulf of Volos, can be traced back at least as far as the Middle Bronze Age, when it shared most, if not all, of the characteristic features of Middle Helladic society (Maran 1992; *cf.* Voutsaki 2010, 100). There appears to have been some delay in the adoption of these features compared to their origination and development in the Peloponnese and elsewhere – a phenomenon echoed in the later process of Mycenaean ethnogenesis (Dickinson 1977) – but this may be attributed at least in part to the region's relative remoteness from the sources of change.

Likewise, as Middle Helladic society slowly evolved in MH III and LH I, due in part to Minoan and Cycladic influence, a similar evolution occurred, albeit even more slowly, in coastal Thessaly as well. A significant difference, however, was that this external influence,

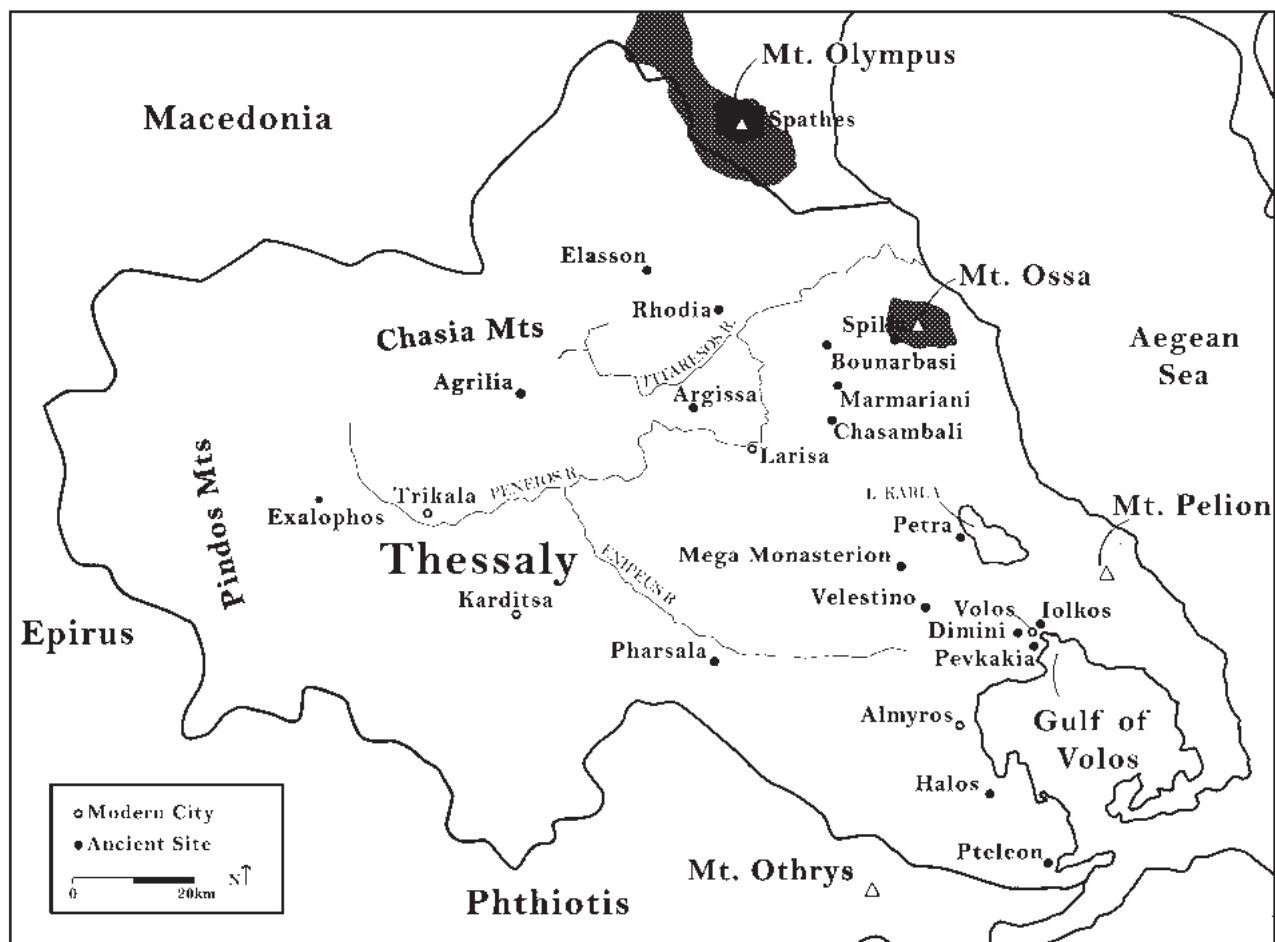


Fig. 11.2: Late Bronze Age Thessaly.

*i.e.*, Minoanisation, was almost entirely indirect at this considerable remove from its Cretan source and Cycladic intermediaries, and thus Minoanisation in southeastern Thessaly ranged from extremely minimal to non-existent (Dickinson 1977, 100; Mountjoy 1999, 823). On the other hand, by the end of LH II, this area appears to have been fully within the Mycenaean orbit. The initial phases of this process are difficult to discern, just as they are further south aside from Mycenae itself and parts of Messenia, but this is largely because Mycenaean ethnogenesis was a sporadic process identifiable initially only by minimal criteria such as LH I pottery and shaft graves, both of which were uncommon and highly localized even within the Peloponnese (Dickinson 1977; Adrimi-Sismani 2007; cf. Maran 1995, 67).

By LH IIB or LH IIIA1 at the latest, however, the coastal zone is virtually indistinguishable from other regions of the Mycenaean core zone. Almost all of the defining characteristics of Mycenaean civilisation are present by LH IIIB, most notably at the centres of Dimini and Iolkos. These include large public structures,

tholos tombs, chamber tombs, a wide range of decorated, plain and monochrome pottery, figurines, Linear B, sealstones and jewellery and other decorative items in a variety of rare and imported materials including gold, amber, faience, glass paste, and semiprecious stones. The excavator of Dimini contends that it was a palatial centre equivalent to those further south (Adrimi-Sismani 2007, 167), and although this claim has been disputed and/or modified by others (*e.g.*, Pantou 2010) it seems clear that there was an elite class comprised of at least several families which controlled valuable resources and labour, engaged in production and trade, and constructed large buildings and tholos tombs. If it is accepted that this subregion was part of the core area of Mycenaean civilisation, then by definition it was completely Mycenaeanised, at least as completely as most of southern and central Greece. The existence of a group of LH III small tholoi and chamber tombs in the vicinity of Almyros may indicate other less powerful elites in this area as well (Theochares 1953; Adrimi-Sismani 2007, 174).

### **Border Zone**

The inland plains, on the other hand, were largely cut off from communication with the Mycenaean world. Unlike the coastal zone, the eastern plain was surrounded by mountains, with only a few narrow passes enabling movement, trade and transportation. There was an opening between the foothills of Mt. Pelion and Mt. Othrys, but only the area immediately north of it was as Mycenaeanised as early and almost as completely as the coastal zone (Fig. 11.2). The sites of Petra and Velestino (ancient Pherae) were large, populous and seemingly prosperous, and the nearby chamber tombs at Mega Monastiri were rich, suggesting at least one, if not more, elite family which controlled the valuable agricultural and lacustrine resources of the plain and of Lake Karla (Adrimi-Sismani 2007, 172–173). This area may be considered an extension of the core zone, or, more plausibly, an intermediate border area transitional between the coast and the broad interior plains.

The remainder of the eastern plain is also transitional, both geographically and culturally. The climate is more continental, with heavier rainfall and greater extremes in temperature, well suited for growing cereals and livestock, but not for olives or vines (Feuer 1983; 1994; 2014). It was densely populated during the Neolithic, and although the Bronze Age is less well investigated due to the lack of excavated settlements, it appears that the Bronze Age population was descended from Neolithic forebears and may have represented a different ethnicity than that of the coastal region. The material culture of this area seems to have been more conservative than the coastal region, at least partly due to its relative isolation (Feuer 1983, 91–92). The most extensively excavated Bronze Age site in this part of Thessaly, Argissa, was a large settlement which existed throughout the Middle Bronze Age, but unlike Pevkakia, demonstrates little evidence of contact with the outside world other than a limited amount of Minyan and Matt-Painted pottery and some influence from the adjoining region of Macedonia (Milojčić 1955; Maran 1992; Horejs 2007).

In the Late Bronze Age, elements of Mycenaean culture are discernible no earlier than LH III and, based on limited settlement evidence, were accepted differentially. It is difficult to assess the nature of sociopolitical organisation in the plains, but clearly it was not as advanced or complex as in the coastal region, which itself may not have achieved the level of state centralisation as elsewhere in Greece. A tribal or chiefdom level of organisation seems likely, possibly the latter since there is some evidence of local elites in some areas. During the Late Bronze Age, there were some impressively large sites such as Bounarbasi, Marmariani and Rhodia (Fig. 11.2) with an abundance of Mycenaean pottery on the surface, as well as a number of small tholos tombs which might have contained the remains of local chiefs and their families (Feuer 1983, 188–189). These tombs, and

a few others, suggest that a small number of inhabitants of the interior plains became quite Mycenaeanised. One might also include several groups of chamber tombs on and around Mt. Ossa, although in the modern political configuration they belong to the province of Macedonia (Poulaki-Pantermali 1991). However, there is less evidence that the great proportion of the population adopted many elements of Mycenaean material culture – let alone social, political or ideological aspects thereof – other than certain kinds of pottery (see below).

This situation is similar in the western plain as well, though with the exception of the Enipeus River drainage and the vicinity of Pharsala (Adrimi-Sismani 2007, 175), it was not as densely settled; in fact, the northern half of the western plain, which may have been flooded during much of the Bronze Age, occupied by hostile nomadic pastoralists – and possibly therefore yet another ethnic population or cultural group – or otherwise unsuitable for agriculture, was largely unoccupied during the Late Bronze Age (Feuer 1983, 125–126). The presence of a large tholos tomb at Georgikon and several chamber tombs in the vicinity of Pharsala (Feuer 1983, 36–37; Papadimitriou 2001, 127–130; Adrimi-Sismani 2007) may also indicate a small number of highly Mycenaeanised families, but otherwise the evidence for Mycenaeanisation in the western plain is largely limited to pottery.

### **Frontier Zone**

Finally, there is the third ecological zone which represents part of modern Thessaly, although it was clearly outside the Mycenaean realm in the Late Bronze Age, since there are few areas within it that are suitable for sedentary agriculture to any extent. Today it is mostly inhabited by nomadic pastoralists (Chang and Tourtellote 1993) of several cultures and ethnicities, and it is not unlikely that this was also the case in the Bronze Age (*cf.* Wilkie 1999). These peoples were even less Mycenaeanised than those of the plains; the only evidence for elements of Mycenaean material culture comes from some groups of cist graves at sites such as Agrilia, although there are some similar cist grave burials at the edge of the plain at Chasambali and Exalophos (Feuer 1983, 129–141; Eder 2009). Like similar cist graves in Epirus, the primary evidence of, and interest in, Mycenaean culture and technology is bronze weapons, although some Mycenaean pottery (some handmade) accompanies them, along with somewhat crude handmade local wares (*cf.* Kilian 1990, 448).

### **Architecture**

In order to understand more clearly the spatial and cultural variation of Mycenaeanisation in Thessaly, I now wish to look more closely at the distribution of various aspects

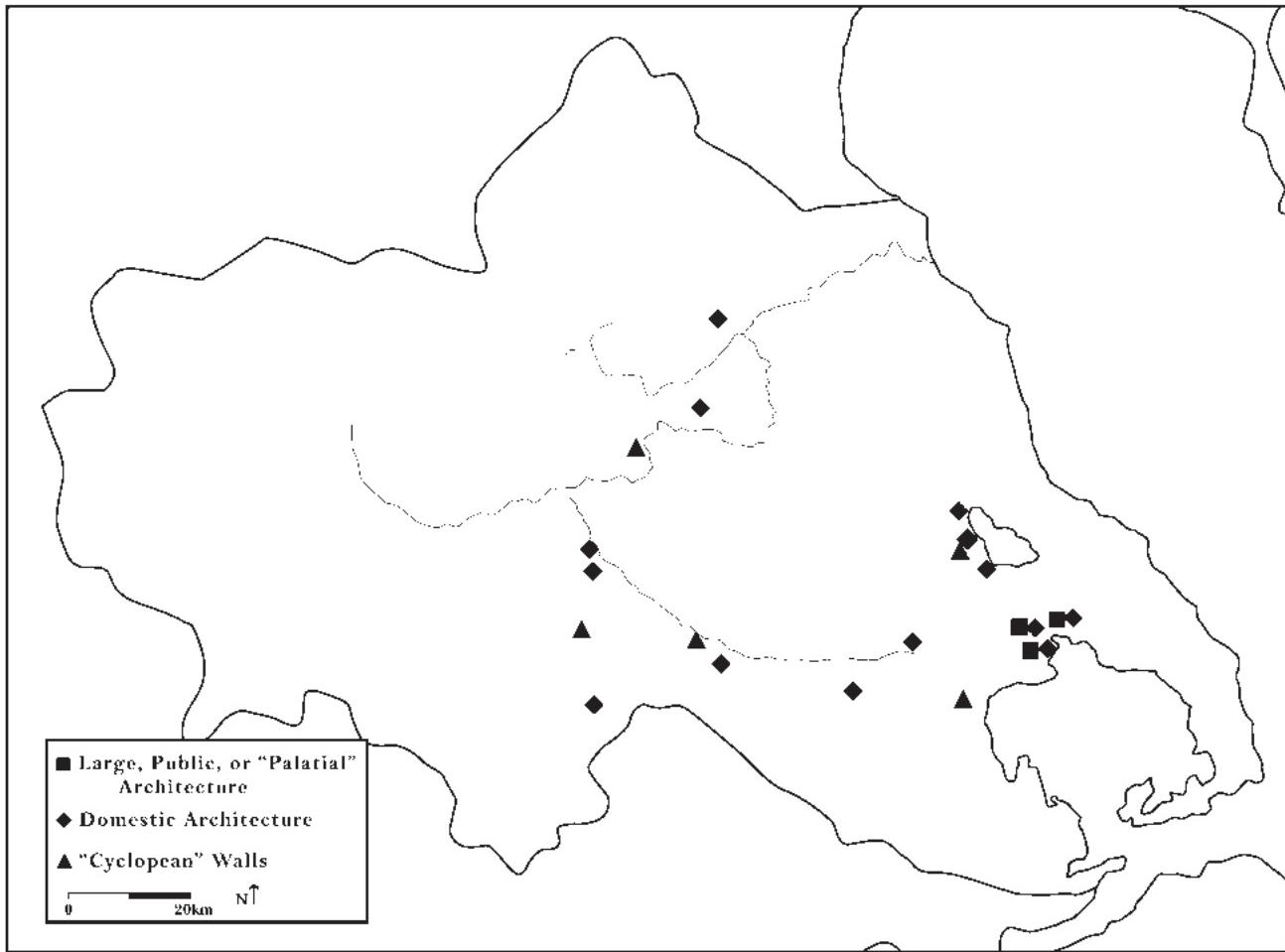


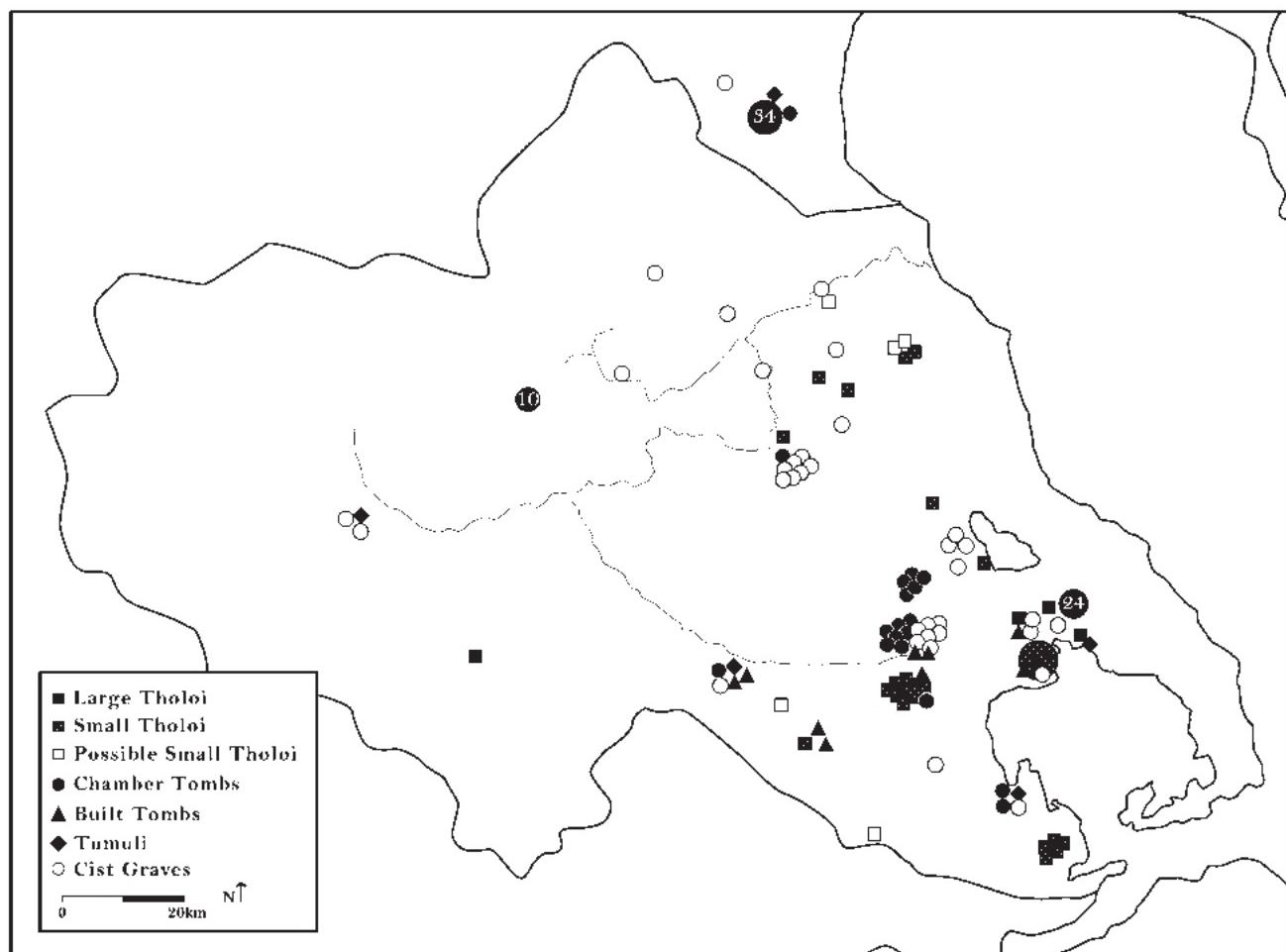
Fig. 11.3: Distribution of Mycenaean Architecture in LBA Thessaly.

of Mycenaean culture, beginning with architecture (Fig. 11.3). Architectural features specifically associated with Mycenaean civilisation include megarons and cyclopean walls, found most prominently at state centres such as Mycenae, Tiryns, Pylos, Thebes and Knossos (Feuer 2004, 201–207; 2011). These multi-story building complexes often include a double megaron structure and large auxiliary buildings incorporating storage facilities, workshops, shrines, public rooms and areas for ceremonial feasting, and a central courtyard, as well as residential areas. Other associated architectural features include ashlar masonry, wooden beams, and frescoes.

Both Iolkos and Dimini have been characterized as palace sites (Theochares 1960; Adrimi-Sismani 2007), although such designations have also been questioned (Andreou *et al.* 1996, 550; Adrimi-Sismani 2007; Pantou 2010, 382–384). The building complex at Dimini is in the form of a double megaron, with workshops, storage facilities and a cult area (Adrimi-Sismani 2007, 162–167). Iolkos, which has not been as fully excavated due to overlying historic and modern

structures, had a large building described by its excavator as a megaron, several other large buildings, plastered walls, stucco floors and fresco fragments (Theochares 1960). At both Iolkos and Dimini, where these large multi-story structures with wooden beams were constructed beginning in LH IIIA, therefore, we see architecture similar to, though not quite as grand or impressive as, other centres in the core zone. Aside from these centres, however, large structures which may have served public functions have been found only at Pevkakia, which may have functioned primarily as a port facility.

Cyclopean architecture – the use of large boulders and stones without mortar in the construction of walls – is found throughout the Mycenaean core zone, most commonly in the form of fortifications, but also used for hydraulic engineering in dams, bridges, and viaducts, as well as for retaining walls (Loader 1998). Neither Dimini nor Iolkos appears to have been fortified but the existence of cyclopean walls has been claimed at a number of sites in Thessaly, most notably Petra. However, it has not been possible to



*Fig. 11.4: Distribution of Burial Types in LBA Thessaly.*

date such fortifications unambiguously to the Late Bronze Age or to a specifically Mycenaean origin.

Mycenaean domestic architecture is, as one might suspect, found more widely throughout Thessaly, although most completely excavated houses are in the coastal zone and in the Lake Karla region. At other sites, as with cyclopean architecture, it has not always been possible to establish definitively whether houses date to the Late Bronze Age, particularly since the form and construction methods do not differ significantly from either Middle Bronze Age or Early Iron Age structures.

### Burials

A second, related category is burial architecture. The richest, most labour-intensive and most conspicuous tombs were tholoi, usually believed to represent the final resting places of royal families and high-ranking members of the ruling class; a step below tholoi were chamber tombs, which probably held the remains of members of elite or wealthy families. Both of these burial forms, which featured multiple

successive interments and prestigious grave goods, often involving highly crafted items made from exotic materials, are widely identified with Mycenaean civilisation. More common burials included pit graves and cist graves, also the most common form of burial in the preceding Middle Helladic period (Dickinson 1994, 222–233; Cavanagh and Mee 1998; Feuer 2004, 167–176).

Tholos tombs in Thessaly can be grouped in terms of their size. There are five known large tholoi, all of which have chambers with diameters of 6.7 meters or more, and four of which – Dimini A and B, Kapakli and Kazanaki – are all within close proximity of each other (Fig. 11.4) in the vicinity of the Gulf of Volos. These four tombs can clearly be associated with the ruling family or families at Dimini and Iolkos (Adrimi-Sismani 2007, 169–171). The second and larger group consists of tholoi with diameters of 5 meters or less. There are perhaps 25 of these smaller tholoi, and possibly as many as 30, if some questionable or difficult-to-date examples are included. In four instances they are found in groups of three or more (Pteleon, Koryphoula, Aerino and perhaps Spilia), and in all other instances, as far as is

known, represent single occurrences. These smaller tholoi may plausibly be considered family tombs of local elites.

Chamber tombs, although less common than elsewhere in the Mycenaean world (Cavanagh and Mee 1998, 135), seem to be equivalent in Thessaly to the smaller tholos tombs, particularly those with abundant, elaborate, and rich grave-goods at Mega Monastiri, Kato Mavrolophos and Pherai (Eder 2009; Adrimi-Sismani 2007). The lack of suitable hills of rock soft enough to be easily dug may account for the relative absence of a grave form more common elsewhere (Feuer 1983), and it may also be that this particular funerary tradition was not widely adopted for other reasons as well, particularly in the interior plains north of the Lake Karla area. Another relatively unusual burial tradition in Thessaly is built tombs, which may also have been constructed due to the lack of appropriate hills (Papadimitriou 2001, 124–130).

On the other hand, cist graves are more widely distributed throughout Thessaly. They are, in fact, the most common form of burial in Thessaly, not only in the Late Bronze Age, but also in the preceding Middle Bronze Age and in the ensuing Early Iron Age (Cavanagh and Mee 1998, 135; Lewartowski 2000, 15). Not only are they widely distributed throughout Thessaly, but there are a number of cist grave cemeteries, most notably at Nea Ionia, Pevkakia, Pherai, and Aerino. Cist and pit graves clearly were those of common folk – although some of the graves at Nea Ionia, close by Iolkos, contained richer grave-goods than the usual deposition of a few pots and bronze jewellery. This evidence suggests that burial in cist graves was the traditional form of burial for the majority of the population, a tradition which existed both before and after the Late Bronze Age. Moreover, all of the mixed burial assemblages referred to earlier in the frontier zone, as well as those at the edge of the plains, are cist graves.

### Pottery

As an index of acculturation, pottery presents several methodological challenges (Feuer 2011, 522). On the one hand, pottery was undoubtedly the earliest and most widely accepted cultural element of Mycenaean civilisation, as well as the most common and extensively distributed form of Mycenaean material culture. On the other hand, the adoption of a limited ceramic assemblage does not necessarily imply any significant degree of cultural integration, particularly if the pottery involves only a limited sphere of activity, such as public feasting. The widespread distribution of Mycenaean vessels for eating, drinking and food storage beginning in LH IIIA1, for example, indicates the popularity of such pottery in a specific social context, but represents a fairly superficial level of acculturation compared to the use of cooking ware or ceremonial objects or the adoption or modification of the technology required to produce them.

Until well into the Late Bronze Age there is limited evidence in much of Thessaly beyond the coastal zone for contact with southern Greece or any other area, and the evidence that exists is almost entirely ceramic. In the Middle Bronze Age, although the local ceramic tradition in the coastal region bears a family resemblance to the more canonical Middle Helladic pottery of the south (Dickinson 1977, 99–100), and the site of Pevkakia in particular most clearly illustrates the importation, borrowing, and imitation of its typical wares (Maran 1992), the only indication of this influence in the interior is the occasional Grey Minyan sherd or pot; otherwise the local ceramic tradition demonstrates considerable continuity with earlier Early Bronze Age pottery and some affinity with that of Macedonia.

This situation continues into the early Late Bronze age as well. LH I pottery, a Minoan-influenced fineware with limited distribution outside of the Peloponnese, is nonexistent in Thessaly, and LH IIA virtually so, even in the coastal zone (Dickinson 1977; Mountjoy 1999, 807; 2001; Adrimi-Sismani 2007). LH IIB pottery, on the other hand, is found throughout Thessaly, but represents a local regional style probably originating from a workshop in the vicinity of the Gulf of Volos (Mountjoy 1999, 824–835). From LH IIIA1 onward, Mycenaean pottery resembles that elsewhere in the Mycenaean world – *i.e.*, part of the so-called *koine* – produced in a number of workshops within the region (Feuer and Schneider 2003; Mountjoy 1999; Dickinson 1977, 100). That at least 80% of the Mycenaean pottery in Thessaly is locally produced (Feuer 1983, 59; cf. Feuer and Schneider 2003) testifies to the widespread acceptance of this aspect of Mycenaean culture.

Evidence for the kinds of pottery used is limited outside of the coastal zone. At both Dimini and Iolkos the range of shapes and decorative motifs is roughly equivalent to that of other large centres further south (Theochares 1960; Adrimi-Sismani 2007, 164–166), including specialized forms such as rhyta. Megaron B at Dimini contained cooking and food preparation equipment as well as unpainted vessels for storage and consumption including kylikes, bowls, amphoras, cups, kraters, piriform jars *et al.*, much of which appears to have been employed for ceremonial feasting (Adrimi-Sismani 2007, 164–165). Otherwise burials represent the primary source of evidence other than surface finds. Clearly pottery found in burials differs in a number of ways from that found in settlements (*i.e.*, more whole pots, more decorated ware, more closed shapes), but even so the choice of items to be interred with the dead sheds some light on the extent of acculturation in a given socioeconomic class, community or region (Fig. 11.5). The burials in the coastal zone and adjoining areas such as the vicinity of Lake Karla are entirely Mycenaean in character, not only in respect to pottery but other grave-goods as well. Further inland, however, the repertoire of shapes is more limited, with a decided preference for alabastra and an absence of

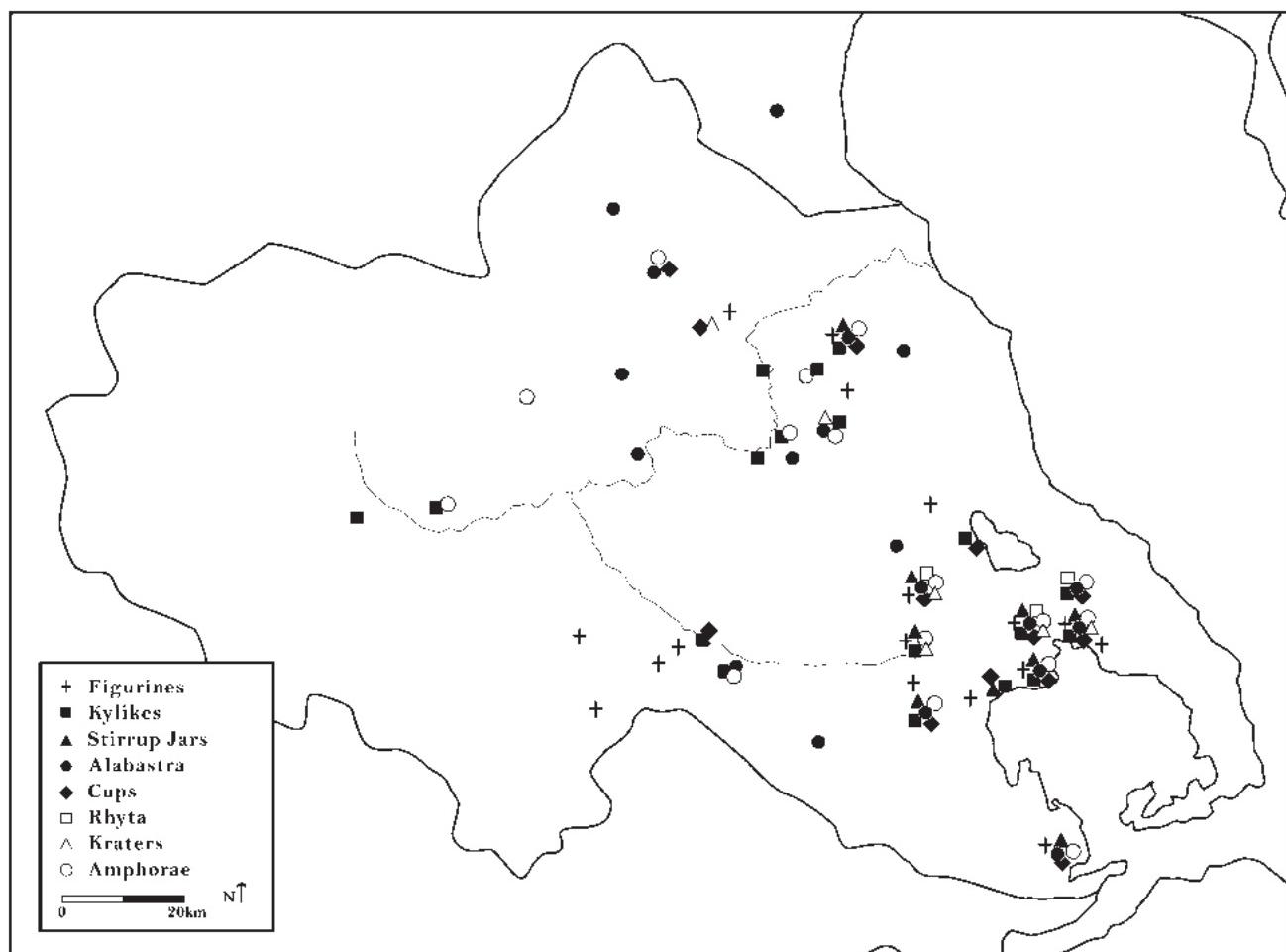


Fig. 11.5: Distribution of Pottery Forms in LBA Thessaly.

stirrup jars, to cite some of the most prominent differences (Feuer 1983, 60–66, tables 1–3; Kilian 1990, 454; Mountjoy 1999; cf. Eder 2009; Andreou 2010, 653). At the periphery of the Thessalian plains, not only is the repertoire of shapes and decoration even more limited, but some of the pots are fairly crude imitations – sometimes handmade, as at Agrilia – of Mycenaean ware and are found along with local wares as well (Feuer 1983, 129–140).

The discovery of kilns at both Dimini and Pherai substantiates the supposition of local Mycenaean pottery production from at least LH IIIA1 if not earlier (Adrimi-Sismani 1999; Batziou-Efstatiou 1994), and neutron activation analysis of pottery from the border zone strongly suggests at least one, if not more, ceramic workshops further north as well (Feuer and Schneider 2003), including the technology of manufacturing wheelmade pottery. There is no evidence, however, other than the use of local clays and a thick white slip imitating the appearance of imports from the Argolid (Mountjoy 1999, 823), of any hybrids involving form or decoration.

Finally, figurines are distinctive ceramic objects which appear to have been made at the same workshops which produced fineware vessels (French 2008, 61). Since they have been found in a variety of contexts primarily within the Mycenaean core zone, they have often been considered to be fairly reliable cultural markers (French 2008, 62). In Thessaly they are known primarily in the coastal zone and nearby areas, but a few have also been found further inland, including at least one which appears to have been made locally (Feuer and Schneider 2003).

### Weapons, Linear B, and Sealstones

Bronze weapons were some of the most technically impressive and highly valued products of Mycenaean workshops. Given the martial cast of Mycenaean society, it is not surprising that they would have been among the most prized and valuable possessions of the warrior class, and beginning with the Mycenae shaft graves, some of the most prominent burial items in the largest and richest

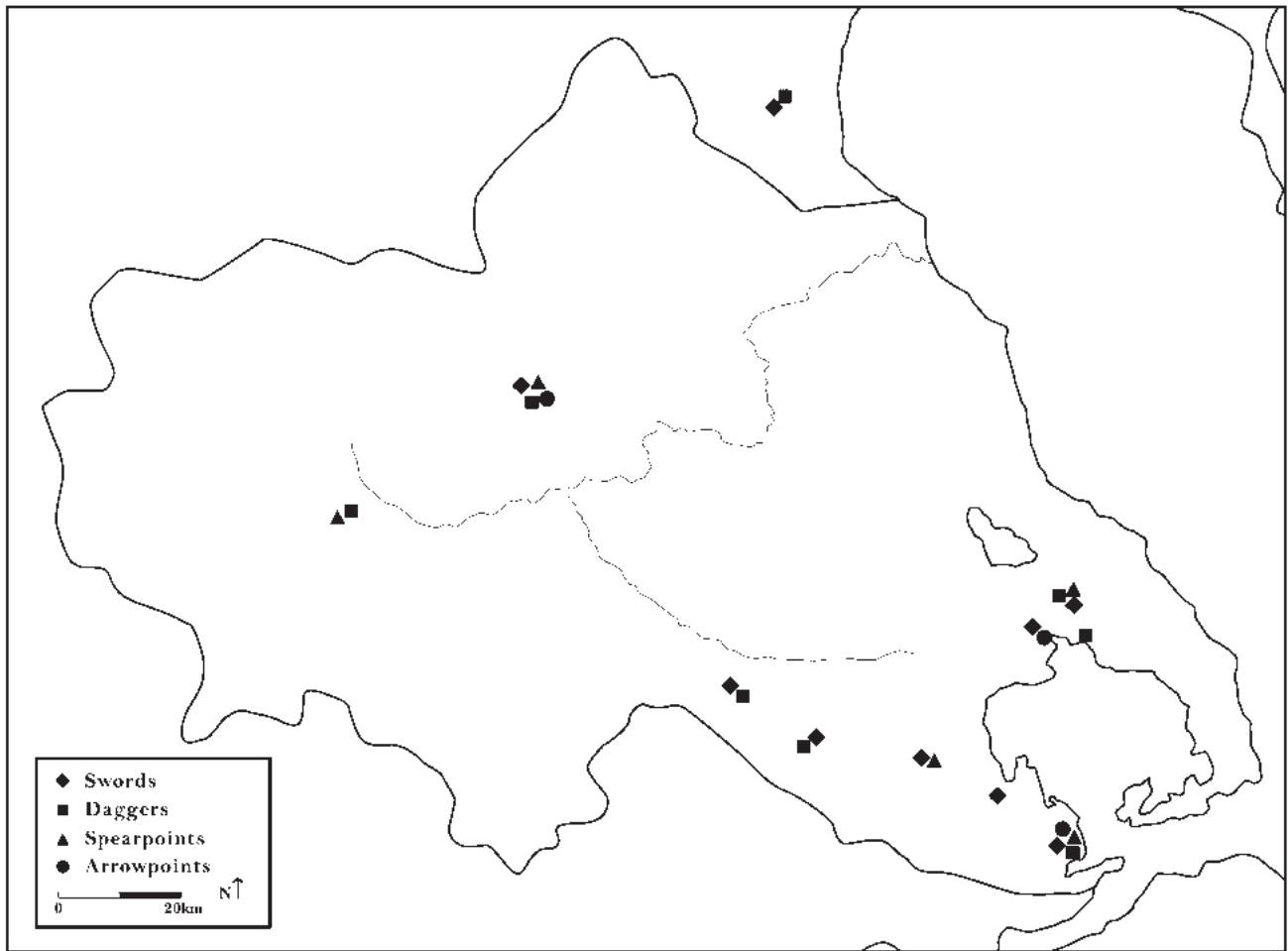


Fig. 11.6: Distribution of Weapons in LBA Thessaly.

tombs. In addition to the value of the bronze and other rare and precious materials used in their construction, and their functional significance, such weapons must also have served as prestigious class markers with considerable social and political significance. For these reasons, swords, daggers and spears seem to have been among the most desirable items of trade beyond the Mycenaean core zone (Kilian 1990, 448; Galaty and Parkinson 2007). It is not surprising, then, that weapons are found in some of the cist graves in the Nea Ionia cemetery as well as in both the border and frontier zones, in cist graves, chamber tombs, and small tholoi (Fig. 11.6).

Finally, I wish to consider briefly several other aspects of Mycenaean civilisation whose use or adoption might indicate some degree of acculturation. The first of these is the Linear B script used primarily for record-keeping, mostly concerning economic activities, and located for the most part in archives of clay tablets at the major state centres of Pylos, Mycenae, Knossos and Thebes (Feuer 2004). Linear B symbols have been found on other media, however, including stirrup jars and other objects, and this

is primarily the context for the limited number of instances in Thessaly, which comprise three signs inscribed on a stone weight in Megaron A at Dimini, two clay tablet fragments at Iolkos, seven signs inscribed on the lintel of the Kazanaki tholos identifying the deceased within and a symbol engraved before firing on the base of an imported LH IIIA monochrome cup or kylix at Pevkakia (Adrimi-Sismani 2004–2005, 20; 2007, 167; cf. also Adrimi-Sismani and Godart 2005; Galanakis and Stamatopoulou 2012; Skafida *et al.* 2012). It is not surprising that all of these examples come from the complex of sites near the Gulf of Volos, and although their use does not necessarily imply extensive use of the script or a record-keeping system similar to those at the major centres further south (Pantou 2010, 383), their presence does suggest familiarity and at least some limited use.

Sealstones are another artefact type which has particularly been associated with the Mycenaean elite class, as are finely-crafted objects made from exotic materials such as gold, amber, ivory, faience, glass paste, and semiprecious stones,

and whose provenance is almost entirely either chamber tombs or tholoi (Feuer 2004, 251–255; Eder 2009). In addition to possible administrative functions and the value of the materials from which they were made, sealstones also appear to have served as amulets and possibly also as jewellery if worn around the neck or the arm. The distribution of these objects in Thessaly follows the same pattern as in the Mycenaean core zone, *i.e.*, in rich burials of those belonging to the elite class (Eder 2009, pl. 2).

### Summary and Conclusions

Having presented and examined evidence for the adoption of Mycenaean culture in Thessaly, I will conclude by discussing the phenomenon of Mycenaeanisation as a manifestation of culture change and acculturation at the periphery of the Mycenaean world. Beginning with the core zone – the southeast coastal region of Thessaly – it seems quite clear that this area, with its proximity to southern and central Greece, with a similar climate and topography and an earlier interest in and affinity for the social, political, economic and cultural developments which occurred there, belongs within that core zone. The existence of a complex of administrative centres and a complex social, political and economic organisation similar if not equivalent to the early state societies of southern and central Greece indicates a similar structure involving an elite class which controlled agricultural and craft production and engaged in the exchange of objects and ideas with other polities (but *cf.* Andreou *et al.* 1996, 550–551, 559; Pantou 2010). The process of ethnogenesis in other parts of the core zone which led to the development of what we have come to term Mycenaean civilisation occurred here as well, though clearly not as early and perhaps not as fully as in the Argolid or Messenia. The presence of “palatial” structures, elaborate and richly furnished tombs, a complete repertoire of ceramic vessels (including figurines) produced since at least LH IIIA1 by kilns at Dimini and Pherai, as well as the use of Linear B and sealstones, all testify not only to the complete Mycenaeanisation of this region, but its position as the northernmost extension of the Mycenaean core zone (*cf.* Eder 2009).

In the border zone, however, the eastern and western interior plains, the available evidence suggests that Mycenaeanisation occurred later and was more variable. While the areas in the vicinity of Lake Karla and Pharsala, primarily due to their proximity to the core zone, appear to have adopted many aspects of Mycenaean culture, these developments are not apparent, for the most part, until LH III. The existence of small tholoi and chamber tombs in this region suggests that some degree of social differentiation had taken place and that a number of local elite families had become fully Mycenaeanised. However, elsewhere in

the plains further north the picture is more uncertain. This uncertainty derives at least in part from the lack of well-excavated settlements from the Late Bronze Age and thus a greater reliance upon data from burials and surface finds in order to evaluate the extent of acculturation.

The most visible evidence of Mycenaeanisation is the existence of LH III pottery throughout the region, but the relative scarcity of unpainted ware – unlike, *e.g.*, at Dimini, where unpainted pottery comprised c. 75 % of the total assemblage (Adrimi-Sismani 1999) – and the limited repertoire of vessel types suggest that the local population, as elsewhere in the Mycenaean periphery, may have accepted and borrowed the set of eating and drinking equipment used in ceremonial feasting or for social occasions while retaining their traditional local pottery and other artefacts for their daily activities. Moreover, it is very likely that the great majority of this pottery was produced by one or more local workshops, *i.e.*, within the plains themselves rather than imported from the coastal zone. Unlike the upwardly striving elite class, this Late Bronze Age equivalent of peasant farmers may have seen no compelling need to acquire any other elements of Mycenaean civilisation. And it is possible, therefore, that this large indigenous agricultural population retained a distinctive local identity; indeed, given the relative scarcity of settlement in the northwestern plain, which could have been occupied by tribes of pastoralists or even foragers, there may have been several ethnic or cultural groups in Thessaly at this time. This premise might be further supported if in fact, as I have suggested elsewhere, that Mycenaean ethnic identity may have been restricted primarily or entirely to the elite class. If this were so, the local elites in the border zone might have been highly Mycenaeanised, but might not necessarily have considered themselves or been considered Mycenaean (Feuer 2011, 528–530).

In the mountainous frontier region to the north – and to the west if one includes the Pindos Mountains which are in the modern province of Epirus – both the climate and topography limit occupation essentially to nomadic pastoralists and therefore the primary archaeological evidence is in the form of cist grave cemeteries. The most striking features of these burials are mixed assemblages of imitations of Mycenaean pottery, handmade local wares and bronze weapons and jewellery. The degree of Mycenaeanisation is thus minimal, restricted to desired bronze artefacts and a limited set of pottery types. Very likely contact between the border and frontier zones was sporadic and limited to minimal exchange and/or hostile encounters.

In this chapter I have tried to place the process of Mycenaeanisation within a broader context of spatial and geographical variation and have sought to demonstrate that decreasing environmental familiarity and suitability in respect to the core zone of southern and central Greece combined with increasing distance from the core zone resulted in decreasing integration within the Mycenaean

cultural system. Thus I have shown that the greatest integration and acculturation occurred in the southeastern coastal zone of Thessaly, a lesser degree of integration and acculturation took place in the border zone of the interior plains and that minimal integration and acculturation existed in the mountainous frontier zone at the utmost periphery of the Mycenaean world.

This does not mean, however, that there is a perfect fit between these geographical and spatial models and the archaeological evidence. I began this chapter by pointing out some of the differences between Thessaly and the other regions discussed; it may be, for example, that the essentially terrestrial environment of Thessaly is not comparable to the primarily maritime orientation of the Aegean and that what may apply on the mainland may not do so in an insular and coastal context. It should also be noted that several areas in Thessaly and adjoining regions do not fit as neatly into the core/border/frontier model, *e.g.*, the greater integration and acculturation of the Pharsala and Lake Karla areas than the rest of the interior plains – although it may be seen that both of these areas can be interpreted as intermediate or transitional zones between the core and border – and the existence of chamber tomb cemeteries in the frontier zone on the flanks of Mt. Olympos. Such seeming anomalies, in addition to the need for more data from settlement sites in northern Thessaly, offer opportunities for further research to test and further refine ideas about acculturation in the Mycenaean periphery.

## Acknowledgements

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## Notes

- 1 Other more specific venues for intercultural contact, in both center and periphery, would include designated locations such as markets, ports of trade and metropoles.
- 2 See, *e.g.*, Kristiansen and Larsson (2005, 25) for a discussion of archaeological diffusion studies.
- 3 This is the classical anthropological definition which spawned a generation of acculturation studies; see Spicer 1961, 517–519; Cusick 1998 and Deagan 1998, 26–28 for surveys of early anthropological acculturation studies.
- 4 Other similar, but not identical, processes include creolisation and syncretism.
- 5 I interpret utility here broadly to include not only utilitarian items or practices, but also those with prestige, symbolic or ideological value such as luxuries, exotica or those with a ceremonial or ritual function.

- 6 However, public acceptance and display of foreign things would not necessarily be incompatible with the retention of traditional values and behaviour in private contexts.

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## MINOANISATION AND MYCENAEANISATION: A COMMENTARY

*Carl Knappett*

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This rich set of papers achieves something that is long overdue: a thorough comparison of the processes of Minoanisation and Mycenaeanisation across the Aegean. Why is such a comparison desirable? Because if we step back and try to think about the wider salience of these phenomena, they really do stand out for their striking potential in allowing comparison of the cultural dynamics of ‘-isation’ across a heterogeneous area, in ‘back-to-back’ periods. It is a striking opportunity that has been little exploited. Why? Is it the case that, for reasons of both geography and chronology, the Mycenaean world has been treated as more of a precursor of the ‘pre-Hellenic’ age, while the Minoan world has been treated more anthropologically as an early state? Or even that the Minoan palaces are treated as prehistoric (undeciphered scripts) while the Mycenaean ones are more protohistoric (deciphered script)? If this rather simple polarisation I project here is at all robust, then it may follow that what we see here is an example in microcosm of the ‘great divide’ between Classical archaeology and anthropological archaeology (Renfrew 1980). Though vestiges of this divide remain, they are perhaps no longer quite so structurally integral to the practice of archaeology in the Aegean – as the papers in this volume show. Indeed, we can and should now look to some of the interesting new work on ‘-isations’ in the Greek and Roman worlds, as progress has recently been more rapid than in the comparable treatments in Aegean prehistory.

However, we should hold back and pause for a minute before being inspired by this work to rush into comparisons of Minoanisation and Mycenaeanisation. Caution is needed in this comparative exercise, for the last thing we should do is reify each of them, creating separate phenomena for comparison. There are four potential problems stemming from reification of these terms:

1. assumption rather than demonstration of a core-periphery relationship
2. tendency to treat the phenomena as institutions, and hence as something unitary and state-run, rather than micro-scale, contingent, and regionally varied
3. treatment of each as monolithic, not only over space but also time: failure to recognise temporal unfolding and variability of both phenomena
4. Corollary failure to see how the latter may evolve out of the former; need to recognise likelihood that little boundary existed between them

What I wish to show is how ‘globalisation’ approaches that promote a more ‘multi-sited’ or ‘decentred’ approach can help us get past each of these problems.

### Core-Periphery

One of the principal problems that stems from reification is that we simply assume that Minoanisation diffuses across a periphery from a Minoan core, and likewise Mycenaeanisation from a Mycenaean core. This core-periphery assumption that is written into the very terms is limiting. Indeed, it is precisely why some scholars, inspired by globalisation scholarship, and hence seeking a more decentred approach to Romanisation, have resisted the term. Others, such as Versluys (2014), decide to persevere with it despite its problems. I too do not feel the need to do away with the terms Minoanisation and Mycenaeanisation entirely, just at the moment when we finally start comparing them. But we should nonetheless be very mindful of the core-periphery relationship that is implied rather than demonstrated.

If we begin with Minoanisation, it might at first glance

seem difficult challenging the majority view that Crete was a Minoan core or heartland from which influence radiated. Take MM IIIA–LM IA at Akrotiri for example: it certainly seems that the Cretan imports, and their local imitation, point to a core-periphery relationship (Macdonald *et al.* 2009). But such a perspective does not do justice to the influence of this relationship on Crete itself. After the ‘peer polities’ of the MM II period (Cherry 1986; Knappett 1999; Poursat 2010), Crete undergoes dramatic changes in Middle Minoan IIIA, *i.e.* during the early Neopalatial period, when new ideologies and materialities seem to spread across the island from Knossos, creating a new political landscape (Macdonald and Knappett 2013). One could highlight the new importance of Minoan halls, rhyta, bull iconography, and wall paintings – but even the humble conical cup tells the story. This new kind of plain handleless cup starts to be used extensively across the whole island, at exactly the time when we see off-island influence undergoing major transformations, part of which sees the spread of the conical cup off-island too (Knappett and Hilditch 2015). One could argue, then, that the ‘complex connectivity’ characteristic of globalisation generally (Jennings 2011), and in this case of Minoanisation, is something that happens across the island of Crete itself as well as the wider area of the southern Aegean. This would mean that we might gain more from treating all communities across the Aegean as potential participants in Minoanisation, rather than prioritising those on Crete above those on islands like Thera. By treating Minoanisation as a distributed, multi-sited, network process, we give ourselves the chance to analyse the complex connectivities in play, rather than assuming *a priori* that all of Crete is necessarily the core and all other sites beyond Crete constitute the periphery. Salient here is the interesting phenomenon observed at Knossos of numerous Cycladic and Dodecanesian imports concentrated in the MM IIIA period (Knappett 2006), suggesting that Knossos at this time might have been as connected with ‘off-island’ sites as it was with sites within Crete.

If we can argue with some justification that Minoanisation could have been a distributed, multi-sited, network process, then doing the same for Mycenaeanisation should be even easier. It is somewhat more difficult to defend the idea that Mycenaeanisation was initiated in a periphery by a core Mycenaean heartland – insofar as there is not a single dominant site, in the way that Knossos is for Crete. With major palaces not only in the Argolid, but also Messenia and Boeotia, regions that are quite spread out, there is much less of a sense of a compact core. Thus, given that it is easier to entertain the idea that Mycenaeanisation is a set of processes happening across a wide area, resistance to core-periphery assumptions ought to be more readily achieved. Indeed, comments made in the paper on Kea by Abell and Hilditch help us see some of the issues in identifying a Mycenaean core from which Mycenaeanisation spreads out (Abell and

Hilditch, this volume). For them, it is difficult to really assess how Mycenaeanisation is working in the pottery technology on Kea, because there is very little sense of what ‘Mycenaean’ means, in a core sense, in terms of communities of practice. This observation demonstrates, I think, that we may be better off thinking about Mycenaeanisation as a set of processes happening to varying degrees but simultaneously across a wide area, in what we have typically classified as both core and periphery. An interesting variation is seen in Bryan Feuer’s paper in this volume, in which he argues that the southeastern coastal zone of Thessaly (with sites such as Iolkos), although in northern rather than southern Greece, can be considered as part of the Mycenaean core. Nonetheless, he then creates another semi-periphery and periphery, *i.e.* those outer reaches of Thessaly which only see partial Mycenaeanisation. So this still leaves us with the limitations of radial thinking, which recent approaches in work on ancient globalisations might help us shed (Jennings 2011; Knappett forthcoming). Moving away from core-periphery assumptions may also help us circumvent the problematic notion that the Mycenaeanisation of Crete is something that is happening to Crete, as a periphery now, at the hands of a mainland core. Doesn’t Crete have quite a hand itself in Mycenaeanisation? That certainly seems to be the message emerging from recent reconsideration of the ‘warrior’ burials at Knossos (*e.g.* Preston 1999; 2004). Coupled with the early (LM II) date of the Linear B tablets there (Driessen 1990), and the links between Minoan and Mycenaean religion (Gulizio and Nakassis 2014), one might well wish to attribute a greater role to Knossos in processes of Mycenaeanisation than has typically been the case. The very use of the term Mycenaeanisation acts as a barrier to us imagining an active role for Crete in the process. But surely the mainland polities in part emerge through these widespread connections with Crete and beyond, rather than just imitating them once fully formed.

### **-isations, not Institutions**

The kind of multi-sited approach recommended above also enables the recognition of different regional outcomes, the result in part of various forms of human, material and technological mobility. Such a micro-level perspective provides an important corrective to the macro-level identification of *institutions* that tends to go hand-in-hand with core-periphery thinking (Kristiansen and Larson 2005). The problem with the institutional approach is that it can find it difficult to resist the pull to portray ‘Minoan’ as something unitary. Jana Mokříšová’s chapter highlights the need to look for micro-level mobilities, with a focus on southwest Anatolia, while Jo Cutler in her chapter is able to demonstrate convincingly the probable mobility of a very specific group – female textile workers. And

if there was some mobility of female textile workers (with numerous imported loom weights at various sites), particularly making fine fabrics for elite consumption, then just think of all the other kinds of mobilities and identities that might have existed (see also discussion in Knappett and Kiriati in press). The skilled painters of frescoes that must have travelled, in some way, between Crete and Thera; or perhaps the priests that made their way between Knossos and Miletus; or the metal merchants between Zakros and Trianda, or Kea and Melos? We need to think about the agency of these mobilities, suggesting different kinds of individual identities and roles, while at the same time indicating certain sorts of institutional frameworks that would have been variably followed and resisted. It is the kind of ‘human’ angle that we need; it reminds me of what Dimitri Nakassis has been arguing for the Linear B tablets of Pylos and the numerous named individuals (Nakassis 2013). We have been so concerned to reconstruct institutions that the micro-level has been overlooked.

Naturally, we should not be too quick to discount the potential importance of institutions. Perhaps religious institutions did play a role in the unfolding of Minoanisation and Mycenaeanisation, as Earle implies in his chapter. Maran (2011) has also argued that some of the objects in the Shaft Graves at Mycenae had strong religious connotations, suggesting that the Mycenaean elites “made growing efforts to comprehend the ideological basis of Minoan power” (Maran 2011, 289). And yet we should recognise that identifying ‘religion’ as a distinct institution betrays our own preconceptions, as religion is arguably a modernist, secular category (Fowles 2013, 6). We would need to carefully navigate between the notion of a top-down imposition of a singular Minoan religion – and note that if polytheistic, elements could anyway have been adopted accretively (Gulizio and Nakassis 2014) – and the possibility of many varied local adoptions and alterations of specific artefacts and practices. This is precisely what Maran (2011) seeks to achieve in his treatment of Mycenaean elite practices through the lens of ‘glocalisation’.

### Temporal Unfolding of -isations

While ‘-isation’ terms risk bringing with them core-periphery baggage, they do have the distinct advantage of implying a phenomenon’s unfolding over time. It is hard to think of Romanisation, for example, as instantaneous. Yet this property has not been much exploited – until recently. We do see in the papers here assembled quite a strong concern to move beyond the assumption of Minoanisation and Mycenaeanisation as monolithic temporal blocks, and instead to reveal their temporal unfolding – whether in terms of MM II–MM III–LM IA, or pre-contact/ contact/ hybrid phases (Pavúk and Girella, this volume), or Minoanising/

First Mycenaeanising/Second Mycenaeanising (Raymond *et al.*, this volume). This is also tackled effectively in Earle’s paper on the Cycladic island of Melos. As he underlines, neither Minoanisation nor Mycenaeanisation arrive as packages, but rather unfold gradually over time, with different traits and technologies appearing differentially. This is something that Irene Nikolakopoulou and I have observed for Akrotiri in MM III–LM I too – frescoes, textiles, and pottery appear gradually rather than all at once (Nikolakopoulou and Knappett in press). This makes ‘-isations’ more dynamic of course, and presumably also viewable as rather more strategic and choice-driven.

### The Debt of Mycenaeanisation to Minoanisation: Where Does One Stop and the Other Begin?

From the above point on temporal emergence, we can segue into our fourth point, which is that we should try to think of Minoanisation as an unfolding process that does not simply grind to a halt, for Mycenaeanisation to then take over. Even though the names may keep them separate, reified, we should be looking across the divide between them. The continuous processes between them are very well exemplified in the Miletus case study presented here in the chapter of Raymond and colleagues. Indeed, it is by looking at a number of different sites, Miletus included, that we can more satisfactorily account for change *across* the Minoan-Mycenaean divide. This is another reason for the multi-sited network perspective alluded to earlier.

Presently, how do we account for the switch from Minoanisation to Mycenaeanisation? It is as if the transformation is just a part of the natural pulsing of civilisations. But surely Minoanisation *caused* Mycenaeanisation in some way? This is one of the key areas of debate raised in the paper by Girella and Pavúk: they throw some doubt on Mountjoy’s argument concerning the impact of Minoanisation on later patterns of Mycenaeanisation in the NE and SE Aegean. Vitale in his chapter tells us that on Kos in the SE Aegean Minoanisation was a ‘relatively brief phenomenon’ while Mycenaeanisation was a much longer process. Admittedly, there is probably no simple equation whereby the one leads to the other, but surely the former must in some shape or form ‘cause’ the latter? Whatever the precise dynamics, we should absolutely seek them out – though I am not totally convinced by the idea that they are two sides of the same coin, because the relationship between heads and tails is not very complex!

### Final Thoughts

The editors of this volume have urged us to use the Bronze Age Aegean as a test case for wider notions

of acculturation. In this comparative spirit, I think the phenomena of Minoanisation and Mycenaeanisation provide fantastic material because of their wide timespan and the geographical and cultural diversity of the areas involved. For the challenge of avoiding core-periphery assumptions, we might compare first with Irad Malkin's arguments on the generation of Greek identity as a distributed, network phenomenon. Malkin argues that there was no Greek identity that was then promulgated through colonisation, but that through this very process it took shape (Malkin 2011). Secondly, I have recently had the opportunity to compare Minoanisation with 'Warification' – the processes whereby the Wari empire spread across the central Andes (Knappett 2014). What struck me in the various studies of the Wari empire was that the lack of detailed micro-level analysis of technological practices was denying scholars the opportunity to escape from deep-seated core-periphery assumptions. In the Aegean, however, such micro-level analyses are now quite commonplace, with many different kinds of technologies now subject to detailed *chaîne opératoire* study, as the work of Jo Cutler here in this volume so neatly demonstrates. When we can observe the mobility of various technologies across time and space, with the different skill sets they imply, and such a range of mobile materialities too, we put ourselves in a strong position to interrogate the complexities of Minoanisation and Mycenaeanisation as multiple processes. Furthermore, when we add the key dimension of maritime connectivity and mobility – we should, after all, remember that we are dealing here with coastscapes, seascapes and islandscapes in this archipelago environment (see Tartaron 2013) – then we can also ask how communities of practice for different kinds of technologies exist, thrive, adapt or fail in such environments.

All of which brings me back to the question posed in the original conference symposium in Seattle: are Minoanisation and Mycenaeanisation two sides of the same coin? Although they certainly seem to have been theorized differently, I would conclude that as processes they are intimately and intricately connected. The one may not follow on from the other predictably from region to region, but the latter could not have happened without the former. They form a necessary sequence, in a way that two sides of a coin do not. In fact, by separating them under two distinct labels, like heads and tails, we run the risk of failing to look at their imbrications. By switching the 'core' from Crete to the mainland, it is as if the game is reset. But the networks and connections are still there, as are their changing dynamics and the identities they enable. I am not sure if there exists some superior term to talk about these -isations over time, and perhaps we shouldn't look for one at all. Instead, our energies may be better invested in simply focusing our attention across both -isations, to achieve a unique, long-term picture over much of the 2nd millennium of their heterogeneous social, cultural and political processes. I think this might be much

more useful than continually searching around for the latest postcolonial ideas, whether globalisation, hybridisation, or creolisation. Some frameworks are surely needed, but there is also much empirical work waiting to be done. This is the considerable strength of this volume, and hopefully will inspire further vigorous enquiry into these fascinating phenomena of Minoanisation and Mycenaeanisation.

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## THE MYCENAEANISATION PROCESS

*Michael L. Galaty*

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### Introduction

While reading this volume, I learned something about myself: I am not really or only an ‘Aegean’ prehistorian. While I conduct archaeological research in Messenia, with a focus on the Mycenaean state of Pylos, for many years I have also run archaeological projects in Albania. Working in Albania reoriented my archaeological gaze: down the Adriatic and Ionian coasts, instead of up, Albania to Messenia versus the other way around (Galaty *et al.* 2014a). In fact, in many ways, Pylos was more ‘Adriatic’ than Aegean (Galaty in press), and differently ‘Mycenaean’ compared to the other Mycenaean states (Galaty *et al.* 2014b). This view – from the edge of the Mycenaean world looking in – colours my perception of Mycenaeanisation, as it does that of the contributors to this volume. If Mycenaeanisation took place, we must ask who exactly was Mycenaeanised, where, and when. The players, context, and timing matter.

Working in Albania reoriented me in other, key ways. For ten years I conducted archaeological research in the Shala region of the Albanian Alps, only 75 km from the coast as the crow flies, but a world away in human terms (Fig. 13.1). The Shala Valley was (and is) remote, but not completely closed to the outside world. The people of Shala appear to have practiced a form of “strategic isolationism,” interacting with the coast and with outsiders if and when it was advantageous to do so (Galaty *et al.* 2013). Many of the settlements described in this volume, where Mycenaeanisation is most evident, were coastal gateways to interior zones, like the Albanian Alps, and the individuals living in them were for the Mycenaeans a means to an end, not the end itself (*cf.* Mokrišová, this volume). In places like Albania, where there are finished Mycenaean goods, primarily from tumuli, Mycenaeans, or their intermediaries, likely sought access to raw materials, such as copper ores, that were located in the

mountains (Galaty 2007; Galaty and Lafe 2008; Lafe and Galaty 2009). Their success depended on the willingness of peoples on the interior to participate, a good example of “negotiated peripherality” (Kardulias 2007). We should therefore expect variable processes of Mycenaeanisation on the coast and inland, depending on the nature of relationships established between coastal and non-coastal peoples and between state and non-state entities. Both world-systemic structures and local agency matter.

Finally, my understanding of acculturation processes is strongly coloured by my training as an anthropologist, one who takes a generalizing, comparative approach to human history and behaviour and employs ethnographic data. What is striking to me, albeit not altogether surprising, is that ‘Mycenaeanisation’ is in some ways a lot like ‘Minoanisation,’ ‘Hellenisation,’ and ‘Romanisation,’ and similar phenomena elsewhere in the world (where similar buzzwords are not used). But it is the differences between them, sometimes subtle, that are of most interest, I think, both for what they tell us about the human condition generally, but also for what they tell us about today’s ‘globalizing’ world (see Galaty 2011). If we are to make the Mycenaeans and Mycenaeanisation matter, our conclusions must have cross-cultural and cross-disciplinary meaning.

In this concluding chapter, and with the above in mind, I have three goals. First, I review relevant anthropological-archaeological theory as it relates to Mycenaeanisation processes. Second, I compare Mycenaeanisation in Epirus to the examples in this volume and address cross-regional similarities and differences, arguing that Mycenaeanisation processes should vary considerably across space and time in response to particular ‘glocal’ contexts (Galaty in press; *cf.* Maran 2011). Finally, I briefly assess the importance of Mycenaeanisation studies for our understanding of



Fig. 13.1 Location of the Shala Valley, northern Albania. (J. Seagard).

social-evolutionary processes generally, hybridisation in particular.

### Theorising Mycenaeanisation

Most of the authors who contributed to this volume employ some form of cultural transmission and/or hybridisation theory, albeit couched in post-colonial terms. However, given the origin of these theoretical frameworks in neo-Darwinian approaches to cultural evolution (O'Brien 2008; Cusick 1998), it was surprising how many authors expressly avoided or criticised 'essentialist' (*i.e.* biological) explanations for human behavioural change. Removing any consideration of biology from discussions of culture contact and transmission is, however, misguided, given the plethora of new data linking variation in human behaviour to genes, gene flow, and gene drift.

Like genetic transmission, cultural transmission relies on the concept of 'copying': for culture to be transmitted from one generation to another, there must be individuals able to

duplicate, in 'conformist' fashion, highly adaptive cultural behaviours (Bettinger 2008). But if all individuals in a given population were conformist, and perfect copiers, there would be no culture change, which is itself maladaptive. So every population includes a number of 'learners,' individuals who innovate or are willing to try new things, most of which will be discarded by the parent culture (see also Feuer, this volume). Being a learner entails a certain level of risk and recent genetic studies indicate that risk-taking behaviour is linked to a 7R polymorphism on the dopamine receptor D4 gene (Dreber *et al.* 2009). Interestingly, individuals who possess this polymorphism are also more independent (Kitiyama *et al.* 2014) and, historically, prone to migrate (Chen *et al.* 1999). The 7R polymorphism ranges from 0% in some populations, such as the San, who did not migrate, to up to 78% in some South American populations, such as the Ticuna, who migrated great distances (Chen *et al.* 1999, 310, 314–315). The average for European populations tested was 16% (Chen *et al.* 1999, 314). Given these data, we can assume that in any cultural system, many of the 'learners' who travel, return, and introduce new behavioural traits

to ‘conformists’ possess the DRD4 7R polymorphism. So, whether we like it or not, if we are going to employ cultural transmission theory, and theories like it, we must be prepared for the good possibility that at least some of the associated human behaviours are governed to some degree by genes.

The relationship of cultural transmission theory to biological evolution is not metaphor: it is real and intended. Neo-Darwinian archaeologists argue that cultural evolution, including changes in material-culture traits, like those discussed in this book, is governed by processes of selection that operate like those that govern biological evolution (Barton and Clark 1997). The term hybridisation is also drawn from the biological sciences, and is even more loaded than the term cultural transmission, but its origins and meaning are rarely considered by archaeologists (but see discussion in Card 2013; van Pelt 2013). Throughout this volume authors refer to hybridity in the material-culture record as evidence for Mycenaeanisation. Hybrid pottery, for example, is thought to represent a level of interaction and blending of beliefs and practices that is more than accidental and produces meaningful cultural change, but is rare. Recent research in the biological sciences, however, confirms that species hybridisation is much more common than once thought, tends to occur across environmental or population frontiers, and is actually a driving force in evolutionary adaptation (Abbott *et al.* 2013; *contra* Girella and Pavúk, this volume). Here we should ask, though: what might have to happen to produce hybrid human behavioural patterns indicative of a new cultural ‘species’? Is hybrid pottery enough, or must there be hybrid humans as well?

Hybrid animal species are typically produced in times of stress. Wolf-coyote hybrids, so-called coywolves or “Eastern coyotes,” for example, first appeared in the northeastern United States in the 1930s and 40s, following near extirpation of the Eastern wolf, and are now common (Rutledge *et al.* 2007). In the case of coywolves, female Eastern wolves appear to have mated with male coyotes. In human communities, intercultural children may be produced in many different ways and in multiple contexts, *e.g.* through exogamous marriage, but for such processes to produce a new, hybridised culture, there must be sustained, long-term contact and interaction, followed by a certain amount of ‘drift.’ For a local, non-Mycenaean community to become Mycenaeanised, there would have to have been intermarriage, linguistic exchange (‘creolisation’), and some kind of adaptive advantage conveyed by hybridisation. But how did the process of Mycenaeanisation unfold and who were the involved agents?

It is likely that both men and women, ‘local’ and Mycenaean, contributed to processes of Mycenaeanisation, but in very different ways, depending on context and timing. Various lines of evidence support the notion that most long-distance travel was undertaken by Mycenaean men, *e.g.* from the mainland to Crete, based on Y-chromosome

analysis (King *et al.* 2008), but this probably occurred at a very low rate. As argued above, if migration is linked to the DRD4 7R polymorphism, it is likely that fewer than 20% of Mycenaean men would have felt compelled to travel over long distances. In fact, most prehistoric European men appear to have stayed home, given the low levels of Y-chromosome variability recovered from ancient DNA (Brown 2014). As compared to men, and based on mitochondrial variability in ancient DNA, most prehistoric European women appear to have moved at a higher rate, probably within the context of patrilocal exogamous marriage systems (Brown 2014).

## Modelling Mycenaeanisation

Given the above, we can model the diachronic Mycenaeanisation process as follows. During the initial ‘contact’ phase, small numbers of Mycenaean men, so-called ‘learners,’ likely travelled outside the Mycenaean heartland, ostensibly in search of various coveted raw materials, such as copper. They probably visited or infiltrated coastal gateway communities throughout the Mediterranean, disbursing small numbers of Mycenaean goods, which trickled into the interior, as was the case in southern Albania. Or, as in the case of Thessaly (Feuer, this volume), they crossed overland from the Mycenaean ‘heartland’ into peripheral or frontier zones. These travelling ‘learners’ would have returned to their home communities with exotic goods, but also newfound knowledge, which they may have used to leverage social and political power (Helms 1988). In many parts of the Mediterranean, interaction never went beyond the contact phase and no meaningful change occurred amongst local, non-Mycenaean people, as appears to have been the case in southern Albania. But in a few rare instances, interaction was sustained over the long term. As attested in the ethnohistoric record, there are various methods whereby different culture groups maintained trade contacts over long distances, one of the primary being through male trade partnerships and marriage exchanges (see numerous examples in Flannery and Marcus 2012). In communities where this occurred, ‘hybrid’ people would have been the immediate result, accompanied by hybrid material culture.

Processes like exogamous marriage are difficult to reconstruct from the archaeological record, but ethnographic analogy can help frame the discussion. In northern Albania, for the Shala tribe (Alb. *fis*), we managed to track and map exogamous marriages over the course of a century, employing census records and ethnographic interviews (Galaty *et al.* 2013, Chapter 5). We also know something about the extent of male trade partnerships. Most men from Shala maintained trade partnerships in Gusinje in Montenegro, Peja in Kosovo, and Shkodra, located close to the Albanian coast (Fig. 13.1), all of which could be reached from Shala in a long day’s walk. Men acquired

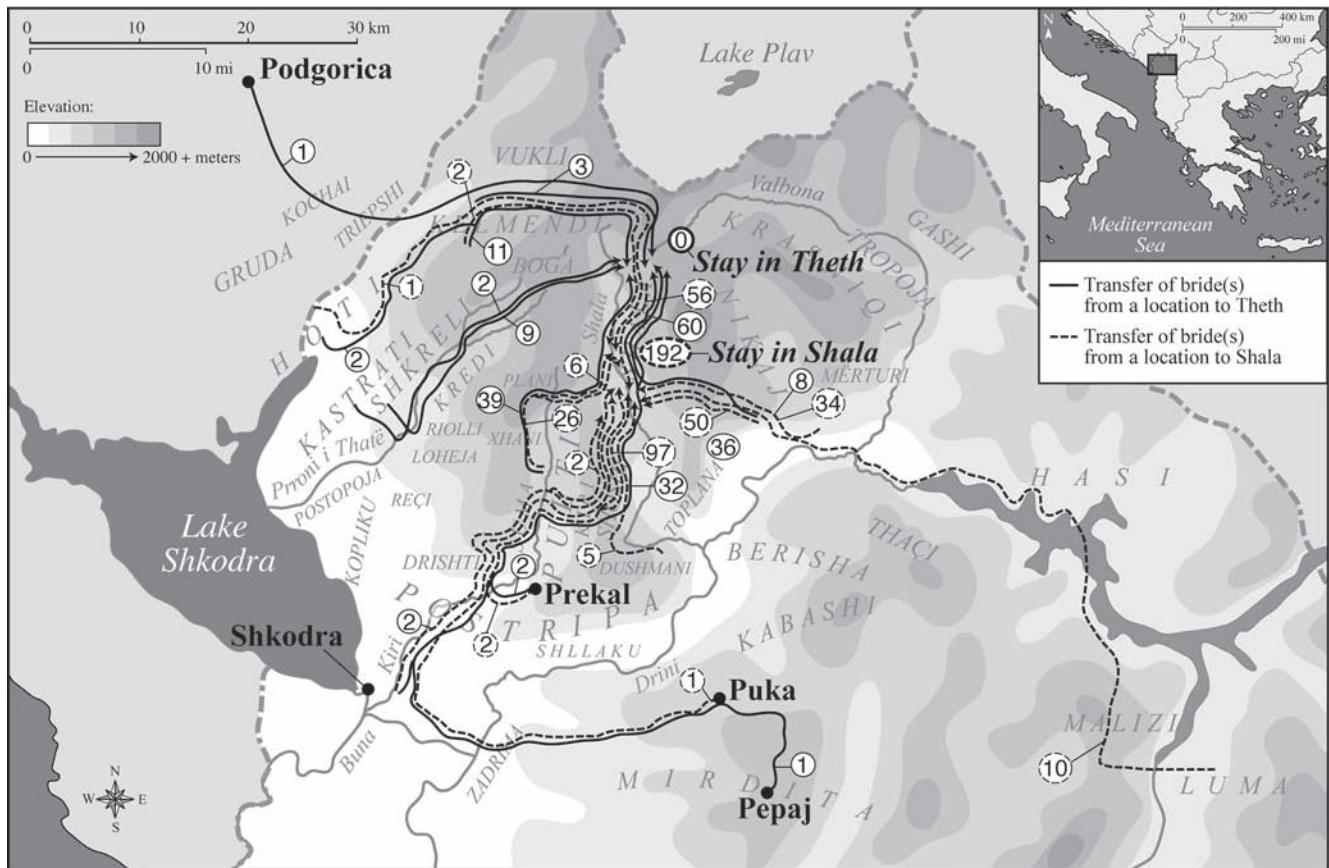


Fig. 13.2 Shala's patrilocal exogamous marriage network. (J. Seagard).

various prestige and utilitarian goods in market towns, which they could not make themselves or acquire at home. Some Shala men also worked for the Ottomans, and other state powers, as mercenaries, often quite far from home (Galaty *et al.* 2013, Chapter 4). Interestingly, trade relationships and mercenary service caused some amount of Ottomanisation amongst northern Albanians.

In 1918, Shala's patrilocal exogamous marriage network encompassed much of northern Albania (Galaty *et al.* 2013, 92–93) (Fig. 13.2). Seventy percent of Shala men married women from other, non-restricted clans within the tribe or with the contiguous tribe of Shoshi. The other 30% married women from any of twelve other, non-contiguous tribes. Importantly, the male trade system was not any wider than the female exogamous marriage system. Again, Albanian men who travelled outside this system did so primarily as mercenaries, with the goal of eventually returning home. When the Albanian marriage system is scaled and mapped onto Messenia, it encompasses the whole of the Mycenaean state of Pylos (Fig. 13.3). If Mycenaean regional marriage networks were anything like those of northern Albania, they cannot account for Mycenaeanisation processes outside a particular state's territory. Even if we string such systems together, at least four (approximately 300 km) would

be needed to reach the Mycenaean northern periphery. However, if such a network were centered on Cephalonia, which was, it seems, well integrated into the Mycenaean world, it would stretch to Glykys Limin, the so-called Mycenaean 'port of trade' located north of Preveza in Epirus (Tartaron 2001; 2004; 2005). It seems likely, therefore, that Mycenaean influences in northwest Greece were mediated by Ionian island populations or via Aitolokarnania (see Tartaron and Zachos 1999), working through agents in coastal gateway communities, like Glykys Limin, which were much more Mycenaeanised than any settlement anywhere in southern Albania.

In terms of timing, the first contacts between Mycenaeans and non-Mycenaeans were probably made by travelling 'learners,' perhaps independent traders, who were operating on their own in foreign territory. This doubtless happened early in the Mycenaean phase, building on MBA prototypes of journeying warrior-hunter-traders (see Wright 2008). Mycenaean goods from this period found in Albania are almost exclusively weapons dating to the MH III–LH IIA period (Bejko 1994). This makes sense if most connections forged during this period were between men based on a search for metal sources and an exchange of metal goods. Given that a trade relationship was mutually beneficial,

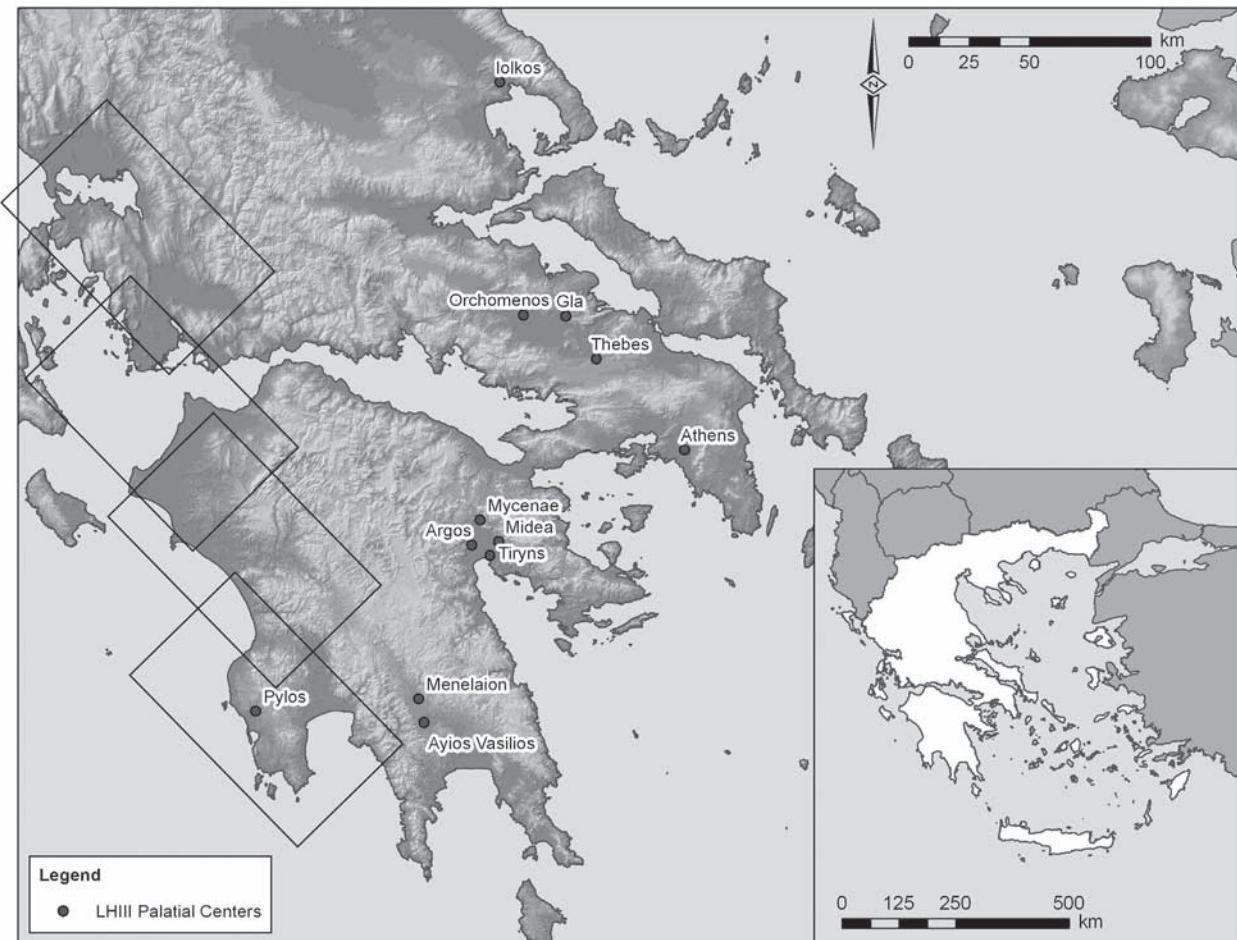


Fig. 13.3 Shala's marriage system scaled and mapped onto Messenia, and from Messenia to Epirus. (R. Siefried and M. Galaty).

some men would have set up formal trade relationships, followed by an exchange of wives or daughters, and a period of 'creolisation' ensued. The women who moved from one place to another, from Mycenaean to non-Mycenaean territory and vice versa, probably brought dowries with them, accounting for some transfer of foreign material culture, but they also brought technologies of practice (see papers by Cutler and Abell and Hilditch, this volume). Given that most Bronze Age hand-built pottery was made by women, girls likely learned from their mothers relatively immutable, non-transferable methods for constructing pots and design elements that were, compared to forming techniques, far more open to copying and transfer. In this context small numbers of poorly made, hybrid/imitative' pots would have been produced and consumed in domestic contexts. This is not an example of 'regression' – there is no such thing as regression in evolutionary terms, only adaptation – rather hybrid pots likely signalled for makers and consumers the cultural affiliation(s) of female members of creole households. This kind of pottery is not found in southern Albania, but it does appear at Glykys Limin

(Tartaron 2001; 2004; 2005) and elsewhere in Epirus, primarily of LH IIIA2 to LH IIIC date (Tartaron and Zachos 1999, 68–69).

Using Glykys Limin as an example, we can also perhaps identify additional stages in the Mycenaeanisation process, beyond contact and creolisation. Communications between Epirus and the Mycenaean world (again, probably through the Ionian Islands or via Aitoloakarnania) appear to have been at their height during the LH IIIA–B phase (Tartaron 2004, 157; Tartaron and Zachos 1999), *i.e.* during the palatial period. The Nikopolis Project found Mycenaean-style architecture at 4 sites, Mycenaean pottery at 15, imitation pottery at 6, and Mycenaean bronzes at 26 (Tartaron and Zachos 1999, 58; see also Tartaron 2004, 27–28, 147). All four sites with Mycenaean architecture are located close to each other and near what would have been the mouth of the bay, including at Ephyra, which, according to Tartaron (2001; 2005; see 2004, 39–43 for a detailed site description), may have been a Mycenaean 'colony.' A nearby site, Koumasaki, produced 1000s of flint blades and may have been a facility for processing hides, which

were destined for export (Tartaron 2005, 156; see also 2004, 50–51). Mycenaean pottery was recovered from sites throughout Epirus, both coastal and interior, but always in very low numbers (Tartaron and Zachos 1999, 58–59). Local Mycenaean-imitation pottery was found at Ephyra and then additionally only at sites on the interior, primarily those clustered around the Ioannina Basin (*ibid.*). The most widely distributed Mycenaean goods, however, were bronzes, primarily weapons, which were recovered from sites, mostly graves, throughout the region (*ibid.*).

It seems likely that Mycenaean contacts in Epirus were made first to support the metal trade. Bronze weapons would have been exchanged for various indigenous products – *e.g.*, hides, honey, slaves (another potential source of hybridisation) – that were of interest to Mycenaean traders, who also sought access to copper ores. Only somewhat later, following creolisation, was Mycenaean pottery traded as well, which may signal the adoption of new eating and drinking habits, probably through the intervention of women, who also sometimes produced imitation pottery for local consumption. Mycenaeans may well have settled at Ephyra, at the head of the Glykys Limin. This ‘colony’ or gateway community appears to have been largely abandoned by the end of LH IIIC (Tartaron 2004, 148), so it seems likely that it was sponsored by centers located to the south, which were linked to the Mycenaean palatial economy, perhaps that of Pylos itself.<sup>1</sup> When the palaces collapsed, the colony was abandoned. Unlike other Mycenaean peripheral zones, where the primary trade good was fine pottery, northwest Greece and southern Albania appear to have attracted industrial-scale manufacture and importation of bronze weaponry. By the end of the Mycenaean period, local smiths had co-opted the bronze industry, producing a wide variety of so-called ‘northern’ style swords and other weapons (Tartaron and Zachos 1999, 69). Similar swords were also traded to or produced in southern Albania.

To summarise, there appear to have been roughly four steps in the Mycenaeanisation process in Epirus (*cf.* Tartaron 2004, 154; Girella and Pavúk, this volume, for the NE Aegean): 1) contact, beginning in LH II and accelerating into LH III; 2) creolisation, beginning at Ephyra in LH IIIA and spreading to the interior by LH IIIB; 3) colonisation, at Ephyra and nearby sites by LH IIIA2; and 4) LH IIIC collapse, followed by local hybridisation and drift, carrying into the Early Iron Age. By comparison, in southern Albania interaction with the Mycenaean world never went beyond the contact phase and revolved almost fully around bronze weapons, which appear to have been traded from the coast up interior river systems. Creolisation and colonisation did not occur, and Mycenaean pottery, when it did arrive, was LH IIIC and non-imitative. Mycenaeanisation had little lasting impact in Epirus, despite several generations of sustained interaction, and no lasting impact in Albania. Exactly how the Mycenaeanisation process unfolded in

Epirus and Albania was, however, strongly conditioned by its chronology and source, with both producers and consumers playing a role. Consumers in Epirus and Albania wanted metal weapons and that is what they got. This worked for Pylos, which, unlike Mycenae, did not export pottery in large numbers. Whereas only four potters are mentioned in the Linear B texts from Pylos, hundreds of smiths are recorded. It is perhaps not a coincidence that if Pylians traded north, up the Ionian and Adriatic coasts, it was metal they hawked and ore they were after.

### Testing Mycenaeanisation

Having generated a theory and model of Epirote Mycenaeanisation, we can now test that model against the various episodes of Mycenaeanisation described in this text. As discussed above, in doing so we must consider for each case the steps in the Mycenaeanisation process, the chronology and timing of those steps, the motivations of both producers and consumers, and the source of the Mycenaeanisation impulse. What is clear is that Mycenaeanisation was a variable phenomenon, reflecting both the differences between different Mycenaean states and the differences in different receiving communities. Moreover, processes of Minoanisation appear to have been very different, by comparison, to Mycenaeanisation (*cf.* Abell and Hilditch, this volume; Earle, this volume; Mokrišová, this volume). I will begin with the Cyclades, then the SE Aegean, followed by the NE Aegean and Troy, and, finally, Thessaly.

### The Cyclades

The Mycenaeanisation process appears to have been less intense or perhaps more variable in the Cyclades compared to other regions and was in most cases preceded by many centuries of Minoanisation. In Melos, and elsewhere in the Cyclades, Minoanisation was an elite process tied to changes in architecture and ritual practice, beginning in MC or LC I, followed by steady growth in LC I in the numbers of Minoanising ceramic shapes (Earle, this volume). This growth was perhaps tied to the introduction of the fast wheel during the late MBA and a corresponding decrease in the number of imports (*ibid.*). Here it is important to note that in all cases we know of, historically and ethnographically, the use of the fast wheel is associated with workshop-scale production, usually, though not exclusively, by males (Arnold 1985). This shift may have been supported by elites at Phylakopi, who were linked to Minoan Crete in the context of a “new environment” (Davis and Gorogianni 2008), though the exact mechanisms through which it was effected are as yet unclear. Our evidence for Kea is better, given the ‘practice’ approach taken by Abell and Hilditch and Gorogianni (this volume).

The Minoanisation process in Kea appears to have been broadly similar to that in Melos; the wheel was introduced (or brought) in the late MBA, perhaps through direct contact with (or by) Minoan potters (Abell and Hilditch, this volume; Gorogianni, this volume). We can assume that a Kean potting industry that had been characterised by a domestic mode of production (DMP) was expanded through time to include workshops and a wider variety of shapes (Abell and Hilditch, this volume), which points to competition between manufacturing units. A major change occurred in early LC III/LH IIIA1 at Ayia Irini (and Phylakopi): a “complete cessation of local production of fine, decorated wares, which were instead imported almost entirely from the Mainland” (Abell and Hilditch, this volume; see also Gorogianni, this volume). Abell and Hilditch (this volume) argue that local communities of (ceramic) practice did not imitate Mycenaean wares because they were not valued (by potters, not consumers), or because there was not sufficient interaction between Mycenaean and local Theran potters to allow a transfer of technologies. I think it more likely, however, that Kean (and Melian) potters were out-competed in a Mycenaeanised economy that was more ‘market-oriented’ than the previous Minoanised one (see Parkinson *et al.* 2013 on Mycenaean markets and market economies). This conclusion fits well Cutler’s (this volume) evidence for the spread of discoid loom weights throughout the Aegean during the Minoanising period. In the initial stages, discoid loom weights appear in small numbers, perhaps adopted into a weaving industry characterised by the DMP. Later, at Ayia Irini for example, there may have been workshop-scale production. Interestingly, when the Mycenaeans finally adopted discoid loom weights (and, presumably, upright looms) in LH II–III, they were incorporated into palace economies that managed industrial-scale production of cloth.

The Cycladic pattern of Mycenaeanisation does not fit well the model suggested above for Epirus. There are several reasons for this. Islands operate differently from mainland coastal zones of interaction; there are no interior regions of exploitation to be accessed from island gateway communities, unless they are in close proximity to a mainland coast. Each of the Cycladic islands was its own independent and interacting “small world” (Broodbank 2000). Furthermore, the Cyclades were sandwiched between the Minoan and Mycenaean states and experienced early, sustained, and overlapping contact with both regions. In many ways, Cycladic Minoanisation laid the groundwork for Cycladic Mycenaeanisation, but also allowed or encouraged “negotiated peripherality” (Kardulias 2007) leading to variability. Paraphrasing Vlachopoulos (this volume), Naxos, for example, was scarcely touched by Minoanisation, and yet was more Mycenaean in LH IIIC than were the Myceneans themselves. Finally, the introduction to the Cyclades of Mycenaean material

goods, fine decorated pottery in particular, during the LH IIIA almost certainly emanated from Mycenae itself, was highly commercialised, and fits a pattern found throughout the Eastern Mediterranean. Given the nature of this trade, creolisation and colonisation were scarcely necessary, or had occurred earlier during the Minoanisation process, when new potting and weaving technologies were integrated into domestic systems of production, perhaps through the movement of Minoan men and women. Cyclado-Minoan hybridisation was limited, however, due in large part to the networked nature of Aegean island communities, which reduced drift and ‘speciation.’ The Cycladic experience can be contrasted to that of the SE Aegean.

### ***The SE Aegean***

Mokrišová (this volume) provides an excellent review of mobility theory and summarises evidence for movements of people within and through the SE Aegean and SW Anatolia. Clearly, the Mycenaeanisation process at Miletus sets it apart from all other known examples, both in the SE Aegean and throughout the Aegean region. Miletus controlled a broad swath of the Anatolian coast, with access up interior river systems. The situation is similar to that of Glykys Limin in Epirus (*cf.* Tartaron 2013, with comparisons to Miletus). However, unlike Glykys Limin, Mycenaeanisation at Miletus was preceded by centuries of intense Minoanisation (Raymond *et al.*, this volume). The location of Miletus was strategically important, as attested in extant written documents that make frequent reference to ‘Millawanda,’ enough so that by the ‘second phase’ of the Mycenaean period at Miletus, outright colonisation or ‘Aegean migration’ seems highly likely (Raymond *et al.*, this volume). Miletus appears to have provided the Mycenaeans direct access to Anatolia and the Eastern Mediterranean, perhaps, as was the case in Epirus, in a search for metals. An important part of this effort was commercial production of and trade in fine Mycenaeanising pottery, which made its way inland, whereas Minoanising wares had not (Mokrišová, this volume; Raymond *et al.*, this volume). Unlike the Cycladic islands, which may not have experienced overt Mycenaean colonisation and yet were in close proximity to the Mycenaean centres, the economic equation favoured a colony at Miletus and local production of Mycenaean-style pottery; Raymond *et al.* (this volume) describe the construction of eight kilns at Miletus at the beginning of the Mycenaean period. Hybridisation at Miletus, where the settlement may have been mostly occupied by Mycenaeans (like Ephyra in Epirus), appears to have been limited, but rather occurred at peripheral sites like Kos, where Minoanisation was minimal and yet Mycenaeanisation occurred, especially in LBA IIIA–C when the chamber tomb cemetery at Eleona was in use (Vitale, this volume). The parallels between Kos and Naxos are worth noting.

Thus, the SE Aegean fits the Epirote model relatively well, better than the Cyclades, though commercialised production of Mycenaean fine pottery did not occur at Ephrya. The chronology of Mycenaeanisation is, however, quite similar in both regions: contact and creolisation followed by LH IIIA colonisation, and then hybridisation in peripheral zones in the LH IIIC.

### **The NE Aegean and Troy**

The situation in the NE Aegean and at Troy, as described by Girella and Pavúk (this volume), is different yet again, with much evidence for the highly variable impacts of Minoanisation, island to island and at Troy itself. The earliest evidence for Minoan contacts is from MM II Samothrace (Girella and Pavúk, this volume), whereas Troy apparently experienced very little interaction with Crete (*ibid.*). Girella and Pavúk's 'hybrid' phase is most evident on Samothrace, where many Minoan-influenced shapes were produced (this volume). Elsewhere, there was incredible variety in the local production of 'hybrid' wares. Unlike the Cyclades, local potters in the NE Aegean already employed the wheel prior to Minoan contact. The kinds of technological transfers discussed by Abell and Hilditch and Gorogianni (this volume) for Kea, which limited 'hybrid' pottery production, were not necessary in the NE Aegean and potters were able to take Minoan styles and run with them. Consequently, Mycenaean imports to the region were light through the LH IIIA2, when there was a massive increase, almost exclusively from the Argolid, followed immediately in LH IIIB by widespread local imitation (Girella and Pavúk, this volume). Specialised textile production occurred only at Troy itself (Girella and Pavúk, this volume).

Unlike the Cyclades and the SE Aegean, where Minoanisation deeply impacted local societies, the NE Aegean appears to have rebuffed Minoan contacts and creolisation, even in Samothrace, where, given the presence of Linear A, colonisation may have been the ultimate goal (Girella and Pavúk, this volume). In the NE Aegean, the Mycenaeanisation process was truncated, perhaps by the presence of Troy, an international 'palatial' competitor to the Mycenaean states. Only during the period of greatest commercialisation (*i.e.* LH IIIA–B) was Mycenaean pottery successfully marketed in the NE Aegean. In the Cyclades, potters could not compete with the Mycenaeans and colonisation was unnecessary. In the SE Aegean, the Mycenaeans managed successful colonisation, followed by a certain degree of hybridisation. In the NE Aegean, Mycenaeanisation was limited and hybrid pots do not appear to signal hybrid people and cultures. Like the Cyclades, the NE Aegean also does not fit the Epirote model, but for different reasons.

### **Thessaly**

We used to think that Thessaly was not part of the Mycenaean world, but given the results of excavations at Dimini, recently that view has changed (Adrimi-Sismani 2007). As described by Feuer (this volume), there is no 'hybrid' pottery from coastal Thessaly; rather, Mycenaean pottery was made locally in imitation of southern Mycenaean styles. That said, Thessaly was positioned at the edge of the Mycenaean core zone and unlike other Mycenaean states, directly touched the periphery. Contacts between coastal Mycenaean settlements and upland Thessaly appear to have been minimal; metal items and imitation Mycenaean pottery were deposited in cist graves (Feuer, this volume). Artefact distributions in upland Thessaly were thus similar to inland Epirus, but there was less interaction across the frontier. In short, upland Thessaly was not a colonial context, so there was no creolisation and no hybridisation. Upland, interior Thessaly does not fit the Epirote model at all and instead is reminiscent of southern Albania, where Mycenaean contacts also had no long term impacts.

### **Summary**

To summarise, we can identify several key factors in the Mycenaeanisation process that affected its course in each of the regions discussed in this volume. First of all, geography played an important but not overriding role (*cf.* Mee 2008). There is no direct relationship between distance from the Mycenaean heartland and the trajectory and impact of the Mycenaeanisation process. Rather, local histories and circumstances appear to have conditioned Mycenaean efforts, which were largely economic and sometimes geopolitical. Importantly, prior Minoanisation did not guarantee successful Mycenaeanisation. The Minoan and Mycenaean states were structured differently and thus interacted with and affected various peripheral societies differently (Parkinson and Galaty 2009). Minoan states were 'corporate' entities that connected equivalent social segments across cultural lines by redistributing goods horizontally. Mycenaean states were 'networked' entities that divided social segments across cultural lines by marketing goods vertically, up and down the political-economic ladder. The Minoan strategy worked well in political-economic contexts characterised by stable social relations and fixed modes of production. The Mycenaean strategy worked well in political-economic contexts that were subject to competitive emulation and market penetration.

It seems likely that the Minoans introduced the wheel at the end of the MBA to the Cyclades and SE Aegean, both of which were characterised by transegalitarian social systems and domestic modes of production. Introduction of the wheel was almost certainly accompanied by changes in manufacturing scale, since part-time potters rarely use the fast wheel. The scaling up of the potting industry would

have induced workshop competition and stylistic variation. When Mycenaean fine, painted pottery was introduced into this competitive environment, local potters were priced out of the market. This was particularly true in the Cyclades, where transport costs were low, and expensive systems of colonisation were not necessary. A similar process unfolded in the SE Aegean, but given the distances involved and the economic and strategic importance of SW Anatolia, with its proximity to Cyprus, the Mycenaeans directly colonised Miletus. The NE Aegean, on the other hand, had already adopted the fast wheel prior to Minoan contacts, which resulted in a very different outcome. Minoan, and later Mycenaean, imports stimulated local ceramic industries. Colonisation was not possible or desirable, given the geopolitical situation, which included the presence of Troy. Finally, Mycenaean Thessaly was located along a frontier zone. Colonisation of the Thessalian interior was not a viable option and Mycenaeanisation did not transpire.

In the four regions analysed in this volume, different degrees of hybridisation occurred, ranged along a sliding scale, determined in part by the factors described above, and subject to both world-systemic and local (*i.e.* ‘glocal’) concerns. There was no Mycenaean hybridisation in frontier Thessaly, very little in the NE Aegean, some in the Cyclades, and much more in the SE Aegean. Only in the latter case was an ‘Epirote’ model (partially) followed.

### Conclusion: Explaining Mycenaeanisation

To explain regional variability in Mycenaeanisation and, more generally, hybridisation processes, we can go back to Pylos. If ‘Mycenaean’ traders from Messenia first contacted ‘Epirotes’ (and later ‘southern Albanians’), perhaps through Ionian or Aitoloakarnanian intermediaries, in the LH II–III, they certainly interacted with societies that were transegalitarian and practiced domestic modes of production, but had not been contacted by Minoans. This makes the Epirote situation most similar to Thessaly; however, unlike Thessaly, in Epirus the Mycenaeans attempted colonisation. Given the absence of prior Minoanisation, the colonisation of Epirus must have been preceded by creolisation, supported by marriage exchanges. The travelling ‘learners’ who made first contact with Epirote peoples may have come from Pylos or Mycenae, or any of the other Mycenaean states. Wherever their origin, they must have had very particular goals in Epirus. They may have been after metal ores, but what they did not do was attempt commercial importation or industrial manufacture of Mycenaean fine pottery, as was the case elsewhere in the Mediterranean beginning in LH IIIA. This suggests to me that Mycenae was *not* involved in Epirote colonisation; there was no market for fine pottery and Epirus was not of any overt strategic value to Mycenae, as was Miletus. Epirus and Italy were of economic and,

later, strategic importance to Pylos, however. It seems highly likely that any ‘invasion’ of Messenia at the end of LH IIIB stemmed from the north and west, *i.e.* from Epirus and Italy, which together may have formed an Adriatic (proto-Illyrian) cultural unit. Unlike Pylos, Mycenae operated in the east, in markets that were older, more mature, and commercially open. Hybridisation was most intense in Epirus precisely because it was an active frontier zone, one Pylos – or some Mycenaean entity – sought to access and exploit.

As described above, biological hybridisation occurs most often in contexts where a species is in crisis and gene flow is possible. Once the crisis has passed, gene drift occurs, leading to speciation. Biological hybridisation is very common along ecological frontiers, so-called ‘edges,’ where two different environmental zones intersect. Recently, Hall and Turchin (2006), a sociologist and population biologist respectively, have compared cultural to biological frontiers, and discovered very similar adaptive population dynamics in both. In short, successful hybrid cultures and species often emanate from frontier zones, with predictable cyclical frequency, and dramatic global results (*viz.* pandemics and Mongol hordes). Hall and Turchin (2006) refer to this phenomenon as “long-distance spatial synchrony.”

Fig. 13.4 (adapted from Hall and Turchin 2006, 77, fig. 1) charts the hybridisation process and its relationship to mechanisms of spatial synchrony. Local mechanisms that affect spatial synchrony may be exogenous, *e.g.* movement of people (such as through exogamous marriage systems), or endogenous, *e.g.* historical trajectory (such as towards or away from egalitarian social relations). When various local and non-local societies interact through the exchange of people (and things) and are culturally open, such as might be expected in a frontier zone, they fall into regional spatial synchrony and exhibit gene flow, which is an adaptive response. In some cases, this leads to hybridisation involving interacting local and non-local social segments. Hybridisation may remain a superficial or unsuccessful strategy, but when subjected to global mechanisms of change and crisis, whether exogenous or endogenous, such as disasters or imperial conquest, spatial synchrony is disrupted, gene drift ensues, and hybridised cultures evolve, sometimes rapidly.

The Aegean (Helladic) chronology maps onto Fig. 13.4 as follows. In LH II–III Mycenaean frontier zones formed throughout the Eastern Mediterranean as Mycenaean states expanded. In so doing, they contacted peoples of wildly varying social organisation, running the gambit from egalitarian tribes to complex imperial states. These different contact situations demanded different strategies of interaction (Parkinson and Galaty 2009). For example, Mycenaean activities in Epirus in LH IIIA–B helped stimulate regional spatial synchrony and gene flow ensued, including between locals and Mycenaeans. Synchrony encouraged Mycenaean colonisation, followed by region-

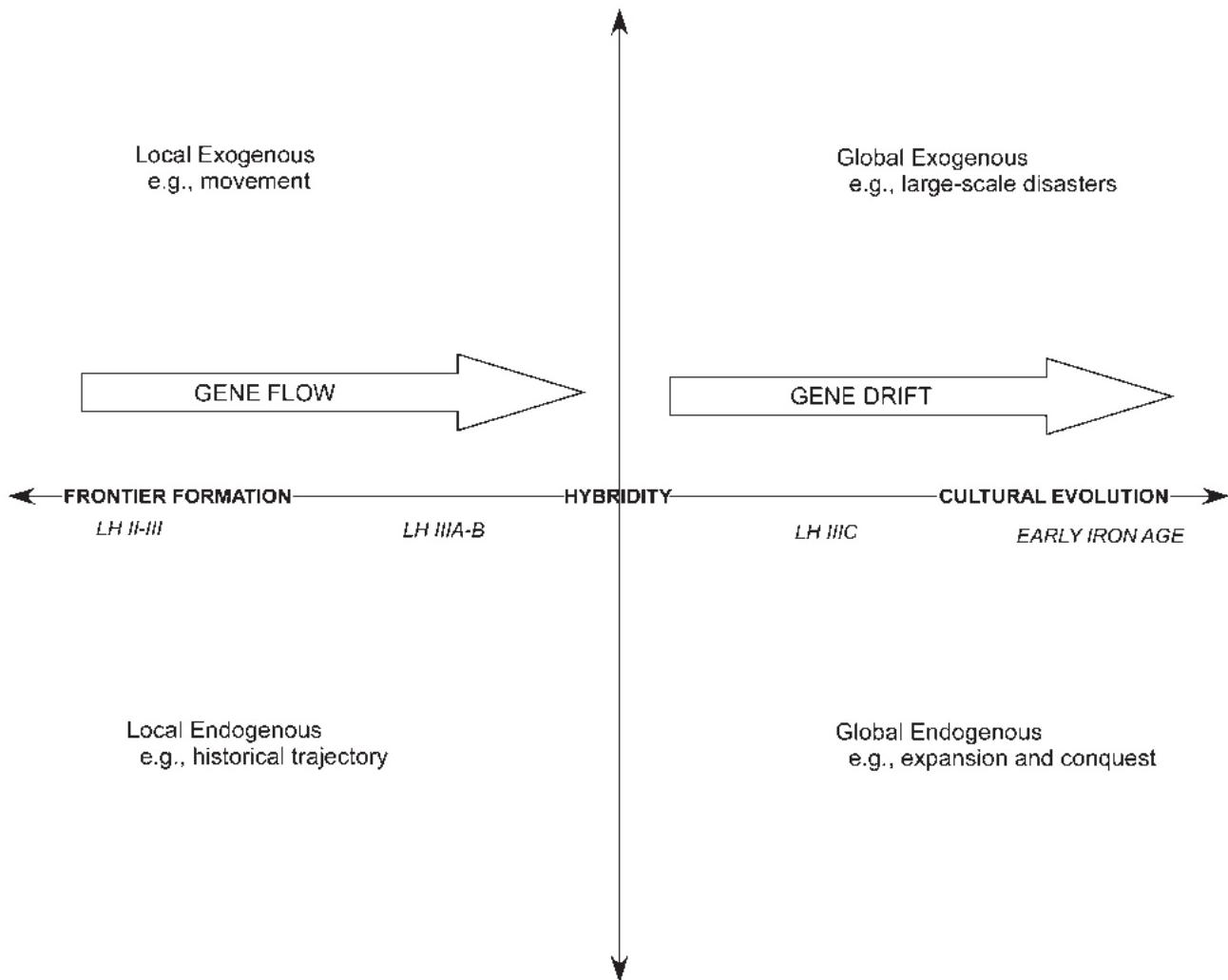


Fig. 13.4: Mechanisms affecting long-distance spatial synchrony, adapted from Hall and Turchin (2006, 77, fig. 1). (M. Galaty).

wide hybridisation (*i.e.* ‘Mycenaeanisation’). The collapse of the Mycenaean states, which may have been caused by natural disasters and/or conquest episodes, encouraged gene drift in the LH IIIC, followed by rapid culture change in the Early Iron Age. It may have been Adriatic peoples who filtered into vacant zones like Messenia, beginning as early as LH IIIB, associated with the spread of so-called handmade burnished wares. These peoples, however, were not alien invaders. They were the hybridised products of generations of intercultural interaction, with Mycenaean blood running through their veins.

The lesson for our modern globalised world is that ‘Americanisation,’ like ‘Mycenaeanisation,’ is epiphenomenal and non-causal. Our focus should be on processes of frontier interaction, spatial synchrony, hybridisation, and evolutionary change, leading to what Friedman (2006, 102) calls “hegemonic shift.” In the Eastern Mediterranean during the Late Bronze Age, a major hegemonic shift occurred, displacing not only the Mycenaean states, but states

throughout the region. Into the void stepped hybridised peoples: Cypriots, Phoenicians, and, of course, Greeks. The new hegemonic powers that emerged from the Dark Age were hybrids. Those that emerge in the 21st century will be hybrids, as well.

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**Note**

- 1 The author is currently working with colleagues to establish ceramic links between Pylos and the Ionian Islands, starting with Zakynthos.

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